



THE LEARNING OF ARCHITECTURE.—II.

ROYAL ACADEMY LECTURES, 1902.

By Professor AITCHISON, R.A., *Past President, Royal Gold Medallist.*

BEFORE proceeding far with the subject of learning architecture I think it advisable to point out to you some of the important advantages that architecture confers on nations, to give you heart to pursue the arduous studies which architecture calls for at your hands. I think I have given you a fair specimen of some of its triumphs. All the fine arts require not only a native gift, but also immense labour, and unless you are some of those extraordinary men who have the requisite gifts for all the arts, such as Orcagna, Alberti, Lionardo da Vinci, Raffael, Michelangelo, and Perrault, it is hard to say which of the fine arts is the most difficult; but at any rate architecture requires several capacities that are not commonly found in the same person. I say so because, although each art generally requires many varied capacities, they are capacities of the same genus, whereas architecture requires several that usually do not go with the artistic temperament. For instance, the science of construction, which, in modern times at least, involves considerable knowledge of mathematics, is not usually found amongst men of emotional organisation, and that peculiar gift of arrangement which goes to form the architectural plan of a building is, I should fancy, not commonly found amongst poets. The Italians were a pre-eminently musical people, and I think they are still, so perhaps it is not much to be wondered at that so many of the Italian artists have had musical capacity combined with their other artistic gifts. Lionardo da Vinci is said to have procured some respite to the tortured souls of tyrants by his exquisite playing on the lute, and although architecture has usually enshrined some of the other great fine arts, such as sculpture and painting, it is art of an entirely different sort, for it does not copy or directly imitate Nature, but merely takes hints from it; besides, the beauty of form in architecture is different enough from the works of Nature to make a contrast with them. It not only evokes emotions by its stateliness and beauty, but also different emotions caused by size and by the stubbornness of the materials employed, by the amount of craftsmanship it embodies, and by its being built by man for men. Milton himself uses buildings to form a contrast with the works of Nature:

Towers and battlements it sees
Bosomed high in tufted trees;

and that is why fountains form so great a contrast to noble architectural piles, as Madame de Staël so eloquently points out in the contrast she draws between St. Peter's and the fountains of its piazza, the ever-gushing water enhancing the impression of the immovable stones.

Charles Garnier has pointed out the obtrusiveness of the creations of architectural art, which cannot be hidden like an ordinary musical instrument, like books, pictures, and small pieces of sculpture, but force themselves on your attention whenever you go abroad; and one of the merits of architecture is that if its works are of any considerable size, so long as they last they must remain in the country in which they were built, so that you must go to their native country to see them, and fine architectural buildings most strongly mark the importance and grandeur of the city or the nation which they adorn. Books, pictures, and the score of music can not only be hidden away but become the possession of all civilised countries, but to contemplate the architecture of a country you must go there. Many of the dumb nations of antiquity have only shown their former greatness by the buildings they have left behind them. The greatness of Egypt could only have been gathered from the occasional notice of it in the poets and writers of Greece and Rome, were it not for its gigantic and massive monuments. It would have been difficult for us to picture any advanced civilisation in Mexico or Peru if the ruins of their temples and palaces had perished.

Every nation that is in a sufficiently advanced state of civilisation to have noble buildings should cherish with the greatest care and lavish its honours on the architects, for its architectural monuments proclaim the degree of cultivation that the nation has attained, and that too in the most permanent manner possible. The design shows the emotional side of the art, but every stone, even if it have only a plain face, shows the skill at which the craftsman has arrived, and when the stone has to be moulded and junctions made on curved surfaces the skill of the mason may reasonably astonish us; besides, in most buildings great art may be displayed in the carving if it be beautiful and harmonise with the noble lines of the architecture. Here in England we only call figure work sculpture, and foliage and floral forms carving, but the French architects always speak of the simplest ornament as sculpture.

Viollet-le-Duc has pointed out a great difference between the French and English masons: he says that he has been told that if an English mason has to work a stone as perfectly as possible on all the six faces he will do each face with the same care and exactness; but that is by no means the case with the French mason. He will work five sides of the stone tolerably, but he will reserve his best work for the part exposed to view, for he has an artist's pride in his work; therefore it is necessary to tell the French mason which face of the stone is to be exposed.

Monsieur Beulé speaks of the temples of the Acropolis as being worked with a care that is usually only bestowed on cabinet work, and Ruskin has a most eloquent passage on seeing the real stones which the ancient Greeks have worked, as having a much greater effect on mankind than reading about them. Being an architect, of course I can only speak as an architect, but I am certainly surprised that so little is made of architects in England. The greatest of them are treated with but little more consideration than would be paid to a successful shoemaker—not that I wish to depreciate shoemaking, for, as Hume says, shoemaking is perhaps not the highest of human arts, but no one has yet met with a boot or shoe that is an ideal fit. It is quite true that we are apt to look down on the perfection of arts that we call commonplace, but perfection in these arts is almost as rare as perfection in the fine arts. I have been told by one of our eminent surgeons that no Englishman can properly sharpen a surgical knife—that surgeons who require perfection in these must send them to Paris or Berlin; and for those finer instruments for operations on the eye neither England, France, nor Germany can sharpen them to perfection, and they have to be sent to Vienna to be sharpened there. In another branch of workmanship, I was told by Castellani, the celebrated Italian goldsmith, that when he first began to copy the Etruscan jewellery he could only produce those minute balls, with which most of the plain gold surfaces are covered, by eating or cutting away the surface of the gold, but he eventually found that the

Etruscans had soldered them on, and he made experiments to see if the Italian workmen could now do them, but he found that no workman, unless he were of Etruscan descent, could ever succeed. Vitruvius, about the time of whose birth there is so much doubt, says in his account of music: "Harmony is an obscure and difficult musical science, but most difficult to those who are not acquainted with the Greek language; because it is necessary to use many Greek words to which there are none corresponding in Latin;" and from this we may suppose that the ears of the Latins were not so acute as to distinguish the delicate differences between notes which the Greeks did. I merely mention this to show the difference in capacities of past nations. You of course understand that one fine art cannot encroach on another: it is absolutely lord of its own domain. Poetry can describe all the thoughts of the mind and all the emotions of the soul, but when it attempts to describe form or colour it merely tries to raise a faint memory of beautiful forms or colours that have been seen by the hearer. It is impossible for poetry to paint the features of a face or the delicate differences of colour and texture, that the painter alone can give. Richard Jefferies, of *The Gamekeeper at Home*, once asked me if a vocabulary could not be framed that a writer could use to describe the colours of flowers and leaves that an artist could turn into the exact tones and tints, but I told him that was impossible. Painting and sculpture are more human than architecture, which merely gives us forms of beauty abstracted from the beauties of Nature, and being man's work it affords different emotions from those excited by the forms of Nature.

Some of the temple-like forms in the Virgen Valley in America are very extraordinary—we may even say that some are beautiful; but these forms do not affect us like the things that have been done by man for man's delight. We suppose that these forms have been carved by the blind forces of Nature, and if they affect us it is because the forms happen to remind us of something that man has done. Nature's chisels are rain, water, snow and ice, heat, dust-laden winds, and lightning. The temples of Greece, after the wood was replaced by marble, are the earliest examples of perfect architecture we know, and these temples were mostly built as offerings to propitiate the gods, and as places where their worship could be daily carried on; and considering that the Greeks are said by Sir Douglas Galton to have been as superior in intellect to the present inhabitants of Europe as the latter are to the negroes, we are not surprised that their architecture has been the most perfect that mankind has yet seen upon the earth. Like all sublime things, the effects of these temples are got by the simplest means; in fact, most young architects, when they have mastered the elements of the Grecian Doric, lament to themselves that the Greeks had invented this order of architecture before them: and we are all apt, like St. Augustine, to curse those who have said our good things before us, but if we had the capacity and industry of the Greeks we could succeed as well as they did with the structures that we now build. No greater mark of genius can be shown than the apparent ease with which a masterpiece seems to have been done, and if you see any masterpiece that you think you could have done you may be sure that it is a creation of genius; much of this apparent simplicity has been produced by the elaborate study of form and of light and shade.

By the investigation of Nature and the invention of generations we have been enabled to use some of the powers of Nature to do our work, but this has not helped us at all in the production of beautiful architecture; we have not only not advanced but have not come up to the efforts of early civilised man, and it is only by the untiring pursuit of all the causes that have produced beauty in architecture that we can ever hope to build structures that rival the Greek. All an architect can do is to build, and the question for architects to consider is how they can evolve from the past new forms or modify old ones, so that they may now evoke those emotions which the building is desired to produce. It is not likely that the great mediæval structures now convey the same ideas or excite the same emotions

as they did at the time of their building; but we know that they were built to raise the emotions of awe, thankfulness, and hope, and we rather incline to take it for granted that they evoke the same emotions in us as they did in the people they were built for. The ecclesiastical buildings of the mediævals certainly excite in us an admiration for their size, grandeur, and invention, achieved too with so small an amount of material; but in many of the buildings that we erect we can hardly say what emotions they are required to evoke. The earliest buildings, if they can be called buildings, that I have seen are the Pyramids of Egypt, and they certainly are fine contrasts to the dull uniformity of the flat desert, and when the Pyramids were covered with polished stone the reflection of the sun at sunrise or sunset must have been almost overwhelming. Before the Mont Cenis tunnel was built there was a piece of porphyry rock, about half a mile long, that had been cut like a piece of cheese and polished by some avalanche, that glowed in the sunset as the limestone facing of the Pyramids never could have done, and on a much vaster scale. This rock was possibly cut and polished at the time of Noah's flood.

It may seem hardly fair to describe to you the emotions that the various buildings I have seen aroused in me, but it is not from vanity I do this, but because I think it better for you that I should describe what I felt than copy out the impressions produced on somebody else.

Pallas Athenè was the Greek Goddess of Wisdom, and the Greeks considered wisdom the most important of the qualities that formed their creed, which were wisdom, courage, temperance, and justice, if we may take Plato as an authority, for he put wisdom first, as we put courage. As Athenè is not one of our divinities it is perhaps difficult to conjure up the emotion that she excited in an ancient Greek; but her temple at Athens, the Parthenon, as an architectural composition is one of the most perfect things that man has created. Every recondite art has been applied to it, and we could look at it for ever without being palled, for it has those slight variations which Nature gives to all her works, and you no more tire of it than you do of an ivy-draped bank. The grace of one of those ruined Ionic columns that you can still see in the portico of the Erechtheum is a revelation of the beauty that man has conceived and executed, as the Caryatid temple at the end of that long blank wall is certainly in my eyes one of the most charming pieces of design that I have ever seen. The Choric monument of Lysikrates is also a most beautiful little structure, although so much ruined by the tooth of time; but it has faults—at least in my eyes.

In that small spot of ground, the Acropolis of Athens, we see a group of buildings that give us the highest opinion of the genius and cultivation of the Greeks—the temple of Wingless Victory (Nikè Apteros), the Propylæum, the Parthenon, and the Erechtheum; and if no one else had been struck by these buildings we should still consider that the authors of such works must not only have lived amongst a highly cultivated people, but must have been blessed with supreme artistic power; but so far is this from being the case that the buildings of the Acropolis were the lodestar of the tasteful of the great Roman Empire. And although the Greeks have excelled in poetry and in the drama, in history, in eloquence, in philosophy, in astronomy and in metaphysics, in painting, sculpture, and architecture—in short, in every form of beauty—they have also given us examples of the most heroic and persistent courage. Their overthrow of the forces of Xerxes reads like a miracle, and when they got a genius like Alexander, though a barbarian, to lead them, they carried their arms further east than their great successors the Romans, who, so far as I recollect, never conquered much country beyond the Tigris, whereas Alexander led the Greeks beyond the five rivers of the Punjab, perhaps across the Ganges. The Romans carried on the arts of the Greeks as far as an inartistic people could carry them on. As mere builders, they built more stupendous works than the Greeks, and they understood the important effect of architectural works on the imagination of mankind.

From which of the nations they conquered they learned the art of building in concrete I know not, but they carried out buildings of colossal size with this mean material, though it was generally faced with precious marbles. For solidity and largeness the Roman buildings were only surpassed by the Egyptian: the aqueducts that cross the Campagna of Rome are not only great works of construction but are most picturesque, as were also the Roman baths and amphitheatres; but speaking of important works of fine art we must give them credit for their triumphal arches, which are both original and striking. The only finished architectural interior at Rome that still remains is that of the Pantheon, which has a superb artistic effect, and this owes much of its sublimity to its unique method of lighting. It seems to me that the great architect who built it, whose name has been lost, had seen the grand effect of one of the Laconicums, and determined to try it in this temple to all the gods.

The Romans considered fine architectural buildings essential to their greatness, and in every conquered country they put up important buildings, which was the sign manual of the conquering race; and that they were aware of this impression is plain, for cities that they took from enemies that they feared or hated they utterly destroyed and left not one stone standing upon another. The Roman Church had apparently caught this view of architecture from the Romans, and covered the whole of the countries that had embraced the new faith with churches, cathedrals, monasteries, and nunneries, and from these civilisation and culture were spread again after they had been destroyed by the irruption of the barbarians.

It must have struck all of you when you have been in some remote part of the country where the old churches still remain, that though they are by no means always striking or beautiful, still they at once call to our minds the presence of a civilising influence; for every architectural building presupposes, besides its art, the presence of a large number of different craftsmen to complete it—the mason, the carpenter, the smith, the tiler or slater, the plumber, the plasterer, and the glazier. No written record that I recollect suggests so much co-operation to complete a fine building as the list of artificers that is given in one of the Constantine Decrees when that emperor was changing the capital of the Roman Empire from Rome to Constantinople. All master workmen were invited to come to Constantinople, and were to be freed from taxes if they brought up their sons to their own trade; and the architects were allowed the same immunity, and their sons, if they were satisfactorily studying the art, had the additional incentive of a salary.

After the development of Byzantine architecture we have the style, imitated from Roman and Byzantine work by the barbarians who overthrew the Roman Empire, now called Romanesque, and the particular form that it took under the influence of the Normans was very grand and impressive, though more or less barbarous. As far as I recollect, the finest instances of large churches or cathedrals in the Romanesque style are those built in parts of Germany. But to return to the Normans: the massiveness and effect of this species of Romanesque can be best seen in England at Durham, where it looks as if inspired by giants or magicians, as too colossal to owe its existence to ordinary mortals. The contrast between it and the early Gothic is nowhere more pronounced than at Southwell Minster, the nave and aisles of which are Norman and the choir Early English, which, though more refined, is so slight in its construction that it is quite overshadowed by its colossal predecessor. There is another striking contrast at Strasburg Cathedral; the nave and aisles are mostly of late Gothic, but by the apse there are some massive Romanesque piers that seem to have belonged to the epoch of the giants, and, after their overthrow, the slight filigree window work may be reasonably set down to mortals. As I have said, no architectural history of Romanesque or Gothic, as far as I know, has come down to us. We know that architecture was studied by many of the priesthood—Lanfranc, for example, who was afterwards made, by William the

Conqueror, Archbishop of Canterbury; and schools were established at some of the mother monasteries for supplying designs for new churches, cathedrals, monasteries, and nunneries. But almost as soon as the invention of the flying buttress, the architects separated themselves from ecclesiastical rule and made trade guilds of their own; and these architects were so full of invention, and so eager to show their improvement in construction and their ready invention, that buildings begun in one century, if not finished at once, showed the development of a new style of Gothic; eventually the possibility of working stone to extreme slenderness and into all sorts of shapes that stone does not seem to lend itself to, and the use of stone in tension, seemed to be the great aim of the architects. All external ornamental tracery was made so slight that in most cases the mere waste from the elements has in a few centuries rendered it unsafe, and had it not been for the care taken by the French Government in repairing its churches and cathedrals a large number of them must have fallen.

The last phase of Gothic in England we call Perpendicular: it is marked by enormous windows, and by tracery that is so fine that it almost looks like cast iron. The vaulting through the best Gothic times was rib and panel vaulting: this form of vaulting about this time ceased to be used, and fan vaulting took its place, the ribs of which were carved out of the solid stone of the vaults, as may be seen in Henry the Seventh's Chapel in the Abbey, and masons' tricks were supposed to be the great achievements of architecture, certainly to an ignorant population vaults which carried pendants must have been most surprising. In my youth I went into the porch of a church with a fan vault, and was much astonished to find that what I at first took for the top of a column was merely a pendant. The Gothic architects also adopted the Saracen methods of complexity, though not so wonderful in effect as the Saracen stalactite domes, which strike you as being the work of enchantment, as their complexity is such that at first sight it seems impossible for humanity to have conceived and carried them out; but when once the method by which these wonders have been achieved is discovered we are disgusted with their monotony, as we are with the Gothic fan vaulting. Nothing can be more oppressively monotonous and dreary than the fan vaulting we see in Henry the Seventh's Chapel, at King's College, Cambridge, and Christ Church, Oxford, so that we hunger for a little bit of art work to replace the inane geometry, and we can well understand the delight with which the Italians welcomed revived Roman. The Gothic epoch was one of the great art epochs of the world: it was not only a new æsthetic form but also a wonderful stride in construction, for certainly no people before or since have ever attained that knowledge of the capabilities of stone that was attained by the Gothic architects and masons. The nations of Europe had, less than a century before the evolution of Gothic, stemmed the torrent of Saracen conquest towards the west and carried the fighting into the Saracens' country, and had held Jerusalem and the neighbouring cities for very nearly 200 years; Jerusalem was taken in 1099 A.D.; the Crusaders were driven out of Acre 1291 A.D. In the year 1000 A.D. this world was expected to be destroyed, and when it was not destroyed buildings without number began to be erected throughout Europe, and human thought in this direction was allowed free scope, without fear of imprisonment, torture, or the stake, which was the reward of every other exercise of thought except generalship. The architects felt that all they could do was to build, and towers, spires, and lanterns burst out all over churches and cathedrals, and the subsidiary arts took an immense stride: the wooden roofs of churches were not only trussed in a new fashion, but the ends of the severed tie-beams blossomed into angels with folded or outspread wings, and the glories of the stained glass were such that even now when we see but the patched remainder of these windows we feel that the highest aspiration of man is to be a glazier, to such overwhelming glory does the old stained glass attain.



REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1901-1902.

Approved and adopted by the Annual General Meeting, Monday, 5th May 1902.

SINCE the publication of the last Annual Report the Council have held 19 meetings, of which the Council elected in June last have held 15. The President, Mr. Wm. Emerson, elected in June for a third year of office, has presided over most of the meetings, except during his absence from December to February in India, when the chair was taken and the various duties falling to the President of the Institute were fulfilled by Mr. John Slater, then Senior Vice-President.

The losses by death have been as follows:—*Fellows*: Edward William Barnes, Robert Isaac Bennett, James Brooks, John McKean Brydon, Arthur Cates, Walter Glynn Doolin, Ebenezer Gregg, William Jeffrey Hopkins, Charles John Innocent, George Judge, John Littlewood, John Mackland, Edward Henry Martineau, Walter Green Penty, Frederick William Porter, James Stevens, William Larnier Sugden, Henry Richard Yeoville Thomason. *Associates*: William Bassett-Smith, William Chastel de Boinville, Goymour Cuthbert, Thomas Gordon, John Lee Hodgson, John Alexander Russel Inglis, Herbert Richard Lloyd, Hugh Thomas Porter. *Hon. Fellows*: The Marquis of Dufferin, Sir Richard Temple. *Hon. Associates*: Hugh Leonard, Alfred Thomas Osmond, Edmund William Smith. *Hon. Corr. Member*: Victor Schroeter.

While recording the above the Council again express their deep regret at the loss of their old and valued colleagues, James Brooks, Arthur Cates, and J. M. Brydon. To Arthur Cates the Institute owes the present development of the Examination scheme. James Brooks was always a wise counsellor and loyal friend. J. M. Brydon, taken away in the midst of his work for the Institute as Vice-President, and in the early tide of his fame as an architect, before he could see one stone of his life's principal work placed upon another, will always be a memorable and pathetic figure.

The Royal Gold Medal was not awarded last year, owing to the death of Queen Victoria. This year Mr. J. F. Bentley, the Council's nominee, died two days before the date appointed for his election. The Council, having consulted the King's pleasure, were unable to recommend the general body of the Institute to present the Medal to Mr. Bentley's family, and have therefore nominated Mr. T. E. Colclutt.

The following tabular statement shows the present subscribing membership of the Institute, compared with that at the corresponding period last year:

Year	Fellows	Associates	Hon. Associates	Total
1901	621	1,028	46	1,695
1902	617	1,071	44	1,732

During the official year since the last Annual General Meeting 25 Fellows have been elected, and 70 Associates. Three Hon. Corr. Members have been elected: Sainte-Marie Perrin (Lyons), Enrique Mariá Repulles y Vargas (Madrid), M. Alberto de Palacio (Madrid).

The usual Progressive Examinations were held in June and November 1901, and, as last year, the Council have to report a steady increase in the number of candidates for each of the examinations. The Preliminary was held in London, Birmingham, Bristol, Cardiff, Dublin, Exeter, Leeds, Manchester, Newcastle, York; the Intermediate in London, Bristol, Leeds, Manchester, Newcastle, York; and the Special Examination for Colonial candidates was held in Montreal. The very cordial thanks of the Council are due to the Hon. Secretaries and Examination Committees of the various Allied Societies and of the Institutes of Quebec and Ontario for their ready and valuable assistance. The Final and Special Examinations were held in London. The results are shown in the following tabulated forms. There were eight candidates for the "Special" Examination for Architects in practice over twenty-five years of age and Chief Assistants over thirty, of whom seven passed.

PRELIMINARY EXAMINATION.

Exempted	Examined	Passed	Relegated	Total
79	310	206	104	389

INTERMEDIATE EXAMINATION.

	Examined	Passed	Relegated
Metropolitan	110	67	43
Non-Metropolitan	56	28	28
Total	166	95	71

FINAL AND SPECIAL EXAMINATIONS.

Examined	Passed	Relegated
119	68	51

The total number of candidates examined during the year was 674 as against 603 in 1900. The number of Probationers of the Institute now stands at 1,699, and of Students at 402.

Owing to the death of the donor there were no Arthur Cates Prizes available for award as a result of the Examinations last year. But now the Council, having invested the sum of £1,500 bequeathed by Mr. Cates to the Institute for the purpose of endowing a Prize to bear his name, have instituted such a Prize under the general conditions regulating the Prizes and Studentships, and have thought they were best carrying out Mr. Cates's wishes by drawing up the conditions as nearly as possible on the lines of those laid down by Mr. Cates for the prizes he awarded during his lifetime.

The Ashpitel Prize was awarded to Mr. Charles Thomas Adshead [A.], who passed the Final Examination in November. A Special Prize of books to the value of ten guineas was awarded to Mr. F. Dare Clapham [A.], a Special Candidate at the June Examination, who made the highest number of marks recorded in the Final Examinations.

The "Special" Examination will be held this year in Montreal and Melbourne.

The Council desire to tender to the Board of Examiners their warmest thanks for their invaluable services.

Statutory Examinations, qualifying for Candidature as District Surveyor in London and for Candidature as Building Surveyor under Local Authorities, were held in October and April last. Certificates of competency to act as District Surveyors in London have been granted to Mr. C. O. Nelson [A.], Mr. T. H. Bishop, jun. [A.], and Mr. A. Maryon Watson [A.].

The Deed of Award of the various Prizes and Studentships was presented to the Institute

at a General Meeting on the 20th January. At the distribution of Prizes on the 3rd February, after the Address to Students by Mr. John Slater, Senior Vice-President, a criticism of the work submitted was read by Mr. H. T. Hare [F.]. An exhibition of the drawings was held from the 14th to the 25th January in the gallery of the Alpine Club. A selection from the Prize Drawings is now being sent round for exhibition at the allied centres.

One of the most interesting events of the year was the Institute visit to Glasgow in October. According to recent custom the Annual Dinner of the Institute is held at a non-metropolitan centre every third year; it was held in 1895 in Manchester, in 1898 in Birmingham, so that in 1901 came the turn of a non-metropolitan gathering. The Glasgow Institute, taking advantage of the fact that the International Exhibition would be a great attraction to their city, invited the Council to hold the Annual Dinner in Glasgow last year. The Dinner took place at the Windsor Hotel, on Thursday, the 4th October, the attendance being larger than at any previous Institute Dinner, with the exception of that held in 1900 in London, when H.R.H. the Duke of Cambridge was present. On Friday the 5th the Institute was publicly entertained by the Glasgow Institute at lunch, the Glasgow University at tea, and the Corporation of Glasgow at a large evening reception. The hospitality shown to the Institute as a body and to members individually gave a social charm to a most interesting visit.

The Annual Dinner will take place this year at the Hôtel Métropole, on Thursday the 19th June.

Messrs. W. M. Fawcett and W. H. Seth-Smith have been elected as representatives of the Council on the Council of the Architectural Museum.

The vacancy on the Board of Directors of the Architectural Union Company caused by the death of Mr. Arthur Cates has been filled by Mr. P. Gordon Smith [F.].

The vacancy on the Tribunal of Appeal (London Building Act 1894) caused by the death of Mr. Cates has been filled by Mr. E. A. Gruning [F.].

The President attended, as the delegate of the Institute, the Jubilee of Owens College, Manchester, celebrated on the 12th and 13th March.

Messrs. Thos. Blashill and John Slater have been appointed to represent the Institute at the Annual Congress of the Sanitary Institute to be held at Manchester in September.

The Council regret to say that the action they have taken with regard to the execution of Mr. J. M. Brydon's design for the new Government buildings in Parliament Street and the amended conditions for the Liverpool Cathedral Competition has been fruitless of result. The correspondence that has taken place with regard to these two matters has already been published in the JOURNAL.

In June last, on the recommendation of the Art Committee, a letter was written to the Dean of St. Paul's urging the public exhibition of the designs for the decoration of the drum of the dome. An acknowledgment of receipt of the letter was received from the Dean.

On the 29th April 1901 a Special General Meeting, summoned under By-law 68 by twelve subscribing members, was held to consider resolutions concerning the competition for the National Memorial to Queen Victoria. The resolutions which were passed were forwarded to Lord Esher, whose reply on behalf of the Memorial Committee is printed in the issue of the JOURNAL for the 27th July, p. 432, Vol. VIII.

At the request of the Master of Magdalene College, Cambridge, and with the permission of Mr. Sargent, R.A., the portrait of Mr. Penrose has been copied for Magdalene College by Mr. C. M. Newton. The portrait of Prof. Aitchison by Sir L. Alma-Tadema, R.A., was lent by the Council to the Royal Birmingham Society of Artists for their Annual Autumn Exhibition.

The Council have been in correspondence with the Ulster Society of Architects, a new

Society admitted into constitutional alliance with the Royal Institute of Architects of Ireland, with regard to the Belfast Corporation Bill now before Parliament. Certain clauses giving the control over the design, elevation, and height of buildings in Belfast were strongly opposed by the Ulster Society. The Council gave the Society their unconditional approval and promise of active support if needed. The objectionable clauses have been dropped in Committee of the Lords, and the Society, being successful, have withdrawn their opposition.

The resolutions passed at the General Meeting on the 2nd December 1901 with reference to Rural District By-laws to the effect that provisions in a model set should be made to enable Rural District Councils to regulate party walls as distinct from external walls, and also with reference to extending the regulations as to party walls laid down in the London Building Act to the whole of the United Kingdom, have been forwarded to the Local Government Board. The Board has not yet communicated its decision on these matters to the Council.

The Council, hearing of the proposed colossal building to be erected by an American syndicate on the "island site" of the Holborn to Strand improvement scheme, and seeing an illustration of the design published in a periodical, sent a protest on the subject to the London County Council, from whom they received a sympathetic and satisfactory reply. [See JOURNAL, p. 160.]

The Joint Committee of the Royal Institute and the Surveyors' Institution have drafted a "Bill to amend the Law relating to Easements of Light," which has received the approval of the Councils of the two bodies. It has now been referred back to the Joint Committee with powers to take steps to have it brought before Parliament as soon as possible.

As the necessity of obtaining new premises is year by year growing more pressing, owing to the gradual expansion of the various interests with which the Institute is occupied, the Council have turned their serious attention to the matter. The sum of £1,000 has been invested in Indian Government Stock and appears on the balance sheet appended to the Report as the nucleus of a Building Fund, which will be allowed to accumulate practically at compound interest. Without wishing at the present moment, when no specific building scheme is before them, to open a formal subscription list, the Council beg leave to draw the attention of members to this fund, to the increase of which they would be very glad to receive any donations. The movement towards obtaining new premises has, however, gone so far as this:—A Joint Committee of the Council of the Institute and the General Committee of the Architectural Association have met and have reported that it is desirable for the two organisations to combine in one building scheme. The Council have approved this report, and have agreed with the General Committee of the Architectural Association that while it was desirable that they should occupy one site and have some of the accommodation in common, yet the respective premises should be to all intents and purposes separate buildings.

The Joint Committee having thus reported on the desirability, are now considering the other point of their reference, *i.e.* the possibility of the two bodies uniting in such a scheme. This can only be decided when definite sites have come under discussion. Two members of the Joint Committee have been commissioned to take steps to find a suitable site. A rough estimate has shown that the requirements of the Institute will need some 10,000 feet super, and those of the Architectural Association 5,000 feet super. The Council will gladly receive information as to available sites from members. The present premises are leased to the Institute until the 24th March 1920, but the lease can be determined at Midsummer 1904 by giving six calendar months' notice.

Owing to the need of more accommodation the Council have had the basement room of the Institute premises converted into an office for the Assistant Secretary. They have also arranged for book-cases for octavo books to be fitted along the wall of the meeting-room, and

are considering a scheme for the treatment of the wall behind the President's chair so as to allow for more picture space. In accordance with a suggestion made at the last Annual General Meeting, the Council have taken measures to secure more comfort and better lighting in the meeting-room.

In order that the Institute should to some extent co-operate in their useful work with the Coal Smoke Abatement Society, the Council have arranged for one of their number to have a seat on the Committee of the Society, and Mr. W. D. Caröe has consented to serve as the Council's representative. The Council have contributed a donation of five guineas to the funds of the Society.

The Council have granted a donation of fifty guineas to the Cretan Exploration Fund (Knossos Excavations).

The Council have also voted a grant of twenty guineas per annum for five years to the British School at Rome.

The question of the appointment of Assessors has been brought to the notice of the Council, first through the discussion at the Business Meeting on the 2nd December, and again by a set of resolutions passed at an informal meeting of London architects interested in competitions. These resolutions (printed in the JOURNAL of the 22nd March) are of a far-reaching character and demand serious consideration from the Council, who have referred the matter for report to a Select Committee of their number.

The following tabular statement shows the appointments to assessorships during the year since the publication of the last Annual Report:—

COMPETITION.	TOWN.	ASSESSOR.
Public Baths	Camberwell	Mr. A. Saxon Snell.
Commercial Travellers' Schools	Pinner	Mr. B. Ingelow.
Board School	Heston	Mr. T. J. Bailey.
Thermal Pump	Buxton	Mr. T. H. Oldham.
Public Library	Kingston-on-Thames	Mr. Basil Champneys.
Infirmary	Leigh	Mr. Alex. Graham.
Chapel	London	Mr. T. E. Collett.
Union Offices	Eccleshall	Mr. P. Gordon Smith.
Church	Southend-on-Sea	Mr. G. F. Bodley, R.A.
Market Hall	Oldham	Mr. E. Salomons.
Public Offices	Aldershot	Mr. F. T. Baggallay.
Town Hall	Stockport	Mr. T. E. Collett.
Town Hall	Deptford	Mr. John Belcher, A.R.A.
Public Baths	Handsworth	Mr. A. Hessel Tiltman.
Old Cliftonian Memorial	Clifton	Mr. R. Selden Wornum.

Copies of the Institute "Suggestions" have been sent to the promoters of the following competitions, together with letters asking for a copy of the conditions for the Library. In cases where it has been known that no assessor was to be appointed, a letter strongly urging the appointment has been addressed to the promoters. In other cases a protest against the conditions has been made by the authority of the Council:—

Board School, London, N.B.
Board School, Newmilns, N.B.
Board School, Sheffield.
Municipal Buildings, Hereford.
Post Office, Middleton.
Constitutional Club, Hineckley.
Library, Hawick.
Masonic Hall, Egremont.
Widening Bridge, Hamilton, N.B.
Market Hall, Llanrwst.
Laying out Promenade, Penzance.
Public Baths, Chelsea.
Workmen's Dwellings, Dudley.
Cemetery Chapel, Bexhill-on-Sea.

Additions to Church, Sheffield.
Golf Club, Sandwich.
School, Guernsey.
Municipal Buildings and Fire Station, Walton-on-Thames.
Baths, Camberwell.
Chapel, Cardiff.
Hearts of Oak Office, London.
Board School, Berwick-on-Tweed.
Cottages, Roscommon.
Mission Hall, Middlesbrough.
Union Offices, Eccleshall.
Municipal Buildings, Stockport.
Board School, Oldham.

Isolation Hospital, Bexhill-on-Sea.
 Board School, Blyth, Northumberland.
 Isolation Hospital, Burslem.
 Art Schools, Hull.
 Conservative Club, Addingham.
 Laboratories, Northampton.
 Public Library, Kingston-on-Thames.
 Dwellings for the Poor, Glasgow.
 Guardians' Offices, Barnsley.
 Schools, Par, Cornwall.
 Baptist Church and Schools, Hebden Bridge.
 Offices, &c., Dartmouth.
 Infirmary, Leigh.
 Board School, Kirkcaldy, N.B.
 Pauper and Idiot Colony, Manchester.
 Working Class Dwellings, Battersea.
 Church, Leeds.
 Yacht Club House, Lowestoft.
 Municipal Buildings, Mountain Ash.
 Board School, Southall.
 Market, Oldham.
 Children's Infirmary, Liverpool.

Public Offices, Aldershot.
 Free Library, Bristol.
 Working Class Dwellings, Liverpool.
 Board School, Barnsley.
 Public Offices, New Malden.
 Town Hall, Harrogate.
 Bridge, Newcastle-on-Tyne.
 Infectious Diseases Hospital, Dunstable.
 Ornamental Fountain, Montrose.
 Cemetery, Audenshaw.
 Workmen's Houses, Coleraine.
 Memorial, Newcastle-on-Tyne.
 Branch Library, Glasgow.
 Police and Fire Brigade Buildings, Sunderland.
 Hospital, Mexborough.
 Free Library, Ilkeston.
 Queen Victoria Memorial, York.
 Clock Tower, Cambridge.
 Nurses' Home, Stoke-on-Trent.
 Generating Station Buildings, Stalybridge.
 Cottage Hospital, Rhydney.

The Council have great pleasure in drawing attention to the prosperous financial condition of the Institute, as shown by the facts that the balance of Income over Expenditure for the year is £1,300, and that during the current year £1,000 has been invested in Indian Government Stock and £500 in Queensland Government Stock, thus bringing the total amount of the invested capital of the Institute up to £11,500. A statement of Income and Expenditure and Balance Sheet for the year ending 31st December 1901 and an estimate of the Income and Expenditure of the present year are appended [pp. 336-338].

REPORT OF THE ART STANDING COMMITTEE.

The Art Standing Committee have held three meetings during the Session.

Mr. Alfred Waterhouse, R.A., LL.D., was re-elected Chairman; and Mr. Macvicar Anderson, Vice-Chairman; and Messrs. E. W. Mountford and H. T. Hare were reappointed Hon. Secretaries. The Committee much regret that Mr. Waterhouse was subsequently compelled through ill-health to resign the Chairmanship, on which Mr. Macvicar Anderson was appointed Chairman, and Mr. T. E. Colcutt, Vice-Chairman.

London Bridge.—The Committee have pleasure in reporting that although the whole of their suggestions were not adopted, modifications in the design have been made on the lines they recommended.

Decoration of St. Paul's.—A letter was written to the Dean of St. Paul's asking that the designs of the proposed decoration of the drum of the dome might be publicly exhibited before the work was proceeded with. An acknowledgment of this letter was received, but it unfortunately contained no undertaking that there should be any exhibition of the designs.

Coney Drawings.—A recommendation was made that a collection of drawings by the late Mr. Coney should be purchased for the Library if possible.

Liverpool Cathedral.—The Competition for the proposed Cathedral was considered, together with the suggested site, and it was eventually decided to remit the matter to the Competitions Committee.

Maidstone Improvement.—A suggested street improvement involving the sacrifice of several interesting buildings was brought before the Committee, and two members were requested to visit Maidstone for the purpose of making an examination of the buildings in question. The matter is still under consideration.

REPORT OF THE LITERATURE STANDING COMMITTEE.

Since the election of the present Committee in June 1901, the Literature Committee have held nine meetings.

At the first meeting Mr. R. Phenè Spiers, F.S.A., was reappointed Chairman; Mr. H. Heathcote Statham, Vice-Chairman; and Messrs. Arthur S. Flower, M.A., F.S.A., and Leslie Waterhouse, M.A., Hon. Secretaries.

The following Sessional Papers, arranged for by the Committee, have been read:—"Mosaics," by Mr. R. Anning Bell, on 18th November 1901; "Baldassare Peruzzi," by Mr. F. W. Bedford [F.], on 17th February 1902; "The Planning of some Recent Library Buildings in the United States," by Mr. Sidney K. Greenslade [A.], on 17th March 1902; "Inlay and Marquetry," by Messrs. W. Aumonier and Heywood Sumner, on 7th April 1902. Papers have been arranged for subsequent dates: "Tradition in Architecture: its Function and Value," by Mr. Alex. N. Paterson [A.], M.A., on 21st April 1902; "The Plan of the House in Relation to the Garden," by Mr. T. H. Mawson, on 26th May.

The Committee regret that through ill-health Mr. Arthur Evans has been obliged to defer until next Session the reading of his Paper, arranged for 16th December 1901, upon "The Palace of Knossos, Crete."

The Committee desire gratefully to acknowledge their indebtedness to the authors of the various articles and reviews contributed to the JOURNAL, and to the publishers who have presented a number of interesting books to the Library during the past year.

"The Arthur Cates Donation" has enabled the Committee to add a number of valuable works to the Reference and Loan Library. These books have been accommodated in the original bookcase, which was generously presented to the Library by Mrs. Cates.

Much attention has been given to the development of the Loan Library, which has been considerably extended by the purchase of a number of works in duplicate.

The Librarian reports to the Committee as follows:—

During the twelve months ending on the 31st March of the present year 395 volumes and 38 pamphlets have been added to the Library of the Royal Institute, exclusive of periodicals, reports, and transactions of Societies, and parts of works issued in serial form.

The number of works presented to the Reference Library was 288.

The works purchased comprise 110 volumes, out of which 56 volumes were added to the Loan Library.

The attendance of readers and borrowers during the year numbered 6,021 (last year, 5,401). The number of works issued on loan was 2,132 (last year, 1,793), 61 volumes having been issued to Fellows, 400 to Associates, 586 to Students, 783 to Probationers, 302 to Ticket Holders.

There was a small increase in the number of books issued through the post; but country members have not availed themselves as largely as might be expected of the privileges of the Loan Library.

The number of tickets issued for admission to the Library other than to members of the Institute or to Students or Probationers was 59 (last year 61).

The most important addition to the Library during the year has been the Arthur Cates Bequest, consisting of 212 volumes, a complete list of which appeared in the Supplement to the JOURNAL, Vol. VIII., No. 20. As the Library possessed many of the works included in the bequest the duplicate copies have, by the direction of the Literature Committee, been made available for use in the Loan Library.

The Institute collection of drawings has received an important addition in the presentation by the Colling Testimonial Committee (through the courtesy of Mr. Osborne Smith and Mr. Herbert Batsford) of five folio volumes of Mr. J. K. Colling's original drawings.

Donations of books have been received from Mr. H. Percy Adams, Monsieur L. Cloquet, Mr. H. Muthesius, Mr. A. Maryon Watson, Mr. B. Ingelow, Mr. H. Townley Sugden, Don E. S. Fatigati, Mr. R. Phenè Spiers, Monsieur M. F. de Dartein, and Mr. Glenn Brown.

Amongst the books acquired during the year, apart from the Cates Bequest, the following may be mentioned: Enlart's *Monuments religieux de l'architecture romane et de transition dans la région picarde*; Strack's *Baudenkmaeler*

des allen Rom; Dutert's Forum Romain; W. H. St. John Hope's Stall Plates of the Knights of the Order of the Garter; Martha's L'Art étrusque, Förster's Monuments d'architecture, de sculpture et de peinture de l'Allemagne; His's Dessains d'ornements de Hans Holbein; Graham's Roman Africa; Kutschmann's Meisterwerke Saracenischnormannischer Kunst in Sicilien und Unteritalien; Bock's Matériaux pour servir à l'archéologie de l'Egypte chrétienne; and Souslow's Monuments de l'ancienne architecture russe.

DATE	DAY ATTENDANCES. 10 a.m. to 5 p.m.					EVENING ATTENDANCES. 6 p.m. to 8 p.m.					
	Members.		Non-members.		Total.	Members.		Non-members.		Total.	Books issued on Loan.
	Library.	Periodicals only.	Library.	Periodicals only.		Library.	Periodicals only.	Library.	Periodicals only.		
1901.											
April	62	26	82	16	186	26	8	90	15	139	172
May	60	6	128	11	205	32	9	126	19	186	178
June	45	14	138	19	216	21	14	81	3	119	168
July	66	20	86	18	190	17	5	46	9	77	123
August	Reference Library closed.					Reference Library closed.					17
September	68	6	78	14	166	24	7	47	12	90	150
October	85	13	154	15	267	36	8	130	7	181	250
November	66	3	165	7	241	33	5	102	11	151	200
December	55	10	92	10	167	26	6	112	7	151	185
1902.											
January	86	8	152	5	251	44	8	123	12	187	240
February	61	14	136	12	223	48	4	104	8	164	232
March	69	14	113	8	204	46	5	71	6	128	217
TOTAL	723	134	1324	135	2316	353	79	1032	109	1573	2132

REPORT OF THE SCIENCE STANDING COMMITTEE.

The Science Standing Committee report that they have held seven meetings since the publication of the last Annual Report, with an average attendance of eight members. Mr. Thomas Blashill was appointed Chairman; Mr. Lewis Angell, Vice-Chairman; and Mr. H. D. Searles-Wood and Mr. Max Clarke, Hon. Secretaries.

The results of the experiments for the purpose of ascertaining the strength of different kinds of brickwork will, it is hoped, shortly be issued in pamphlet form.

With a view to settling definitely the question of standardising the size of bricks a conference between the Joint Committee of the Royal Institute of British Architects, the Institution of Civil Engineers, and the Clay Workers' Association was held on the 26th April 1901, and a resolution was passed that the subject should be referred back to a joint committee to formulate a scheme for carrying out the standardisation.

The Committee recommended the Council to communicate with the Corporation of the City of London, the London County Council, and the new Metropolitan Borough Councils, making suggestions for modifications in the administration of the various Acts of Parliament in relation to the construction of drains. Several of the Borough Councils have adopted the suggestion.

The supporting power of rocks and soils is still under inquiry. The Committee are collecting particulars from various sources.

The Committee have had under consideration the proposed standard sizes of steel sections.

The Committee's suggestions have been forwarded to the Standard Committee of the Institution of Civil Engineers.

The Committee have under consideration the subject of cement concrete in flats and floors, and are waiting the result of some further experiments to make a report on the behaviour of concrete.

The Committee have reported on the Draft By-Laws prepared by the London County Council as to depositing drainage plans.

REPORT OF THE PRACTICE STANDING COMMITTEE.

The usual monthly meetings of the Committee have been held, and three special meetings to complete the book on "Dilapidations." Mr. J. Douglass Mathews, Chairman, Mr. S. Flint Clarkson, Vice-Chairman, and Messrs. J. Osborne Smith and C. H. Brodie, Hon. Secretaries, were re-elected.

The Committee have been looking anxiously for some definite action following the report of the Joint Committee of this Institute and the Surveyors' Institution with reference to the proposed alterations in the law as regards "Ancient Lights"; and the more so by reason of some recent judgments. This being a matter in which this Committee has been and is especially interested, they hope that it is being pressed steadily forward.

As anticipated in our last Report, the new book on "Dilapidations" to be issued by the Institute was completed in proof at the close of last session. Copies were sent to the Council with a request that one should be sent to the Surveyors' Institution and another to the Institute Solicitors asking their kind perusal and suggestions for improvement. Valuable suggestions were received from each, and these are now receiving the careful attention of the Committee, who hope to complete the book by the end of this session. It is proposed to send a copy through our Solicitors to the Incorporated Law Society, asking for any suggestions they may wish to make as to the purely legal parts of it.

On the suggestion of the Council the Committee have proposed alterations in the Institute Form of Contract and Conditions to fit them for use when Quantities are to form a part of the Contract.

A letter from the Bristol Society of Architects suggesting a new clause in Contracts having reference to Prime Costs and Discounts was referred to the Committee by the Council. The Committee reported that the proposed Clause was not satisfactory and would introduce many difficulties, and that Clauses 27 and 28 of the Institute Conditions should be generally accepted.

The Committee's advice was sought by a member of the Institute as to the deduction of provisional amounts in a contract, and he was duly advised thereon.

The special attention of the Council has been called to the case of *Hobbs v. Turner*, tried in the Court of Appeal in January last. In giving judgment the Master of the Rolls said that in the absence of a special contract between the general contractor and sub-contractors the building owner and not the general contractor is responsible to the sub-contractors for payment, as under the general scope of a contract "privity of contract" exists between the building owner and all sub-contractors. The Committee have requested the Council to ascertain whether this decision will interfere with the Conditions of Contract as now published.

FINANCES.

The accounts of Ordinary Funds for 1901, prepared by Messrs. Saffery, Sons & Co., chartered accountants, and audited by Messrs W. Hilton Nash [F.] and Herbert A. Satchell [A.], the Hon. Auditors appointed at the Annual General Meeting of 1901, here follow:—

Draft Income and Expenditure Account of Ordinary Funds for the Year ended 31st December 1901.

Dr.		Cr.	
EXPENDITURE.		INCOME.	
To ORDINARY EXPENDITURE—		BY ORDINARY INCOME—	
Rent.....	£ s. d. £ s. d.	Subscriptions—	£ s. d. £ s. d.
Gas and Electric Lighting.....	935 0 0	589 Fellows at £4. 4s.	2473 16 0
Coals	79 3 9	Ditto, Arrears.....	50 8 0
Salaries	26 8 0	954 Associates at £2. 2s. and 2 on account	
General Printing, Stationery, Stamps, and	1040 11 9	£1. 19s.	2005 7 0
Petty Expenses.....	1477 10 0	Ditto, Arrears.....	89 1 0
Expenses of General Meetings, Exhibitions, &c.	502 9 5	1 reinstated	4 4 0
Housekeeping (including Office Attendant)...	255 5 9	39 Hon. Associates at £2. 2s.	81 18 0
Advertisements in Newspapers	150 2 3	Ditto, Arrears	6 6 0
Examination Expenses	49 19 1		4711 0 0
General Repairs	395 12 6	Dividends on Stocks and Shares -	
Medals and other Prizes	39 14 6	Architectural Union Co.	184 2 0
Grants to Library	20 9 6	Consols 2½ per Cent.	52 0 6
Grant to Architectural Association	186 5 0	Tasmanian Government Stock 3½ per Cent.	62 15 8
	125 0 0	Dominion of Canada 3 per Cent.	34 1 0
	100 0 0	Queensland Government 3 per Cent.	15 16 4
		Interest on Deposit	33 10 3
The JOURNAL—			382 5 9
Reporting	59 17 9	Sale of Publications (other than JOURNAL	
Printing and Binding.....	650 7 2	and KALENDAR).....	248 18 5
Illustrations	120 9 8	Use of Rooms—	
Addressing, Postage, and Carriage	237 12 6	District Surveyors' Association.....	25 0 0
	1068 7 1	Architectural Association	7 10 0
The KALENDAR -		R.I.B.A. Tenants	55 0 0
Printing	138 0 9		87 10 0
Postage and Carriage.....	28 1 3	Examination Fees—	
Contributions to Allied Societies	166 2 0	Statutory	29 8 0
Miscellaneous Expenses (including Dinner)...	278 8 0	Preliminary	688 16 0
Accountants' and Legal Charges.....	124 11 9	Intermediate	400 1 0
Balance of income over expenditure	15 4 2	Final (forfeited).....	130 4 0
	1230 7 7		1248 9 0
		JOURNAL and KALENDAR—	
		Advertisements	530 0 0
		Sales	97 17 2
			627 17 2
			£7306 0 4
			£7306 0 4

SAFFERY, SONS & CO.,
Chartered Accountants.

Examined with the several vouchers and found to be correct. 19th March 1902.

(Signed) { W. HILTON NASH [F.],
HERBERT A. SATCHELL [A.].

Dr.		Cr.	
LIABILITIES.		ASSETS.	
To Sundry Creditors outstanding	£ s. d. £ s. d.	By Cash at Bank	£ s. d. £ s. d.
To Examination Fees anticipatory of	153 15 2	By Investments:—	1723 14 10
election	192 3 0	Architectural Union Co., 263 Shares ...	3643 1 0
To Subscriptions for 1902 received in ad-	102 18 0	Consols 2½ per Cent. £2000	2037 17 5
vance	1000 0 0	Tasmanian Government Stock 3½ per Cent.	
To Building Fund		Stock £1896. 4s. 9d.	2050 0 0
To Accumulated Fund—		Dominion of Canada 3 per Cent.	
Surplus of Liquid Assets over Lia-		Registered Stock £1200	1219 11 0
bilities as per last Balance Sheet	10093 2 8	Queensland Government 3 per Cent.	
Add Entrance Fees received in 1901	296 2 0	Stock £1119. 18s. 11d.	1050 0 0
Arrears for 1901 (as per contra)	233 5 0		10000 9 5
	10622 9 8	By Debtors	127 1 8
Less Arrears included in 1900		By Subscriptions in Arrear 1900	71 12 0
account since received	£191 8 6	Ditto 1901	233 5 0
Furniture bought	54 2 0		304 17 0
	245 10 6		
	10376 19 2	* Total Investments in 1900 ...	£ s. d.
Less Amount transferred to Building Fund		Additions in 1901, viz.—	8960 9 5
as per resolution of Council	1000 0 0	£1119. 18s. 11d. Queensland	
	9376 19 2	Government 3 per Cent.	
Add Balance of Income over Expenditure		Stock, cost	1050 0 0
in 1901	1330 7 7	Total Investments as above... ..	10000 9 5
	10707 6 9		
	£12156 2 11		£12156 2 11

SAFFERY, SONS & CO.,
Chartered Accountants.

Examined with the several vouchers and found to be correct. 19th March 1902.

(Signed) { W. HILTON NASH [F.],
HERBERT A. SATCHELL [A.].

The Revenue Account and Balance Sheet of Trust Funds for the year 1901, audited by Messrs. W. Hilton Nash [F.] and Herbert A. Satchell [A.], here follow :—

Revenue Account of Trust Funds for the Year ended 31st December 1901.

Dr.	£ s. d.	Cr.	£ s. d.
ASHPITEL PRIZE FUND :—			
To Cost of Ashpitel Prize	10 0 0	By Balance from last Account	22 12 0
To Cost of extra Prizes	10 10 0	By Dividend on 26 Shares, Architectural Union Co., at 11s. per share	14 0 0
To Balance carried forward	16 2 0		36 12 0
	<u>36 12 0</u>		
CHARITABLE FUND :—			
To Cash paid Architects' Benevolent Society	5 5 0	By Balance from last Account	1 2 6
To Balance carried forward	1 2 0	By Dividends on £200 10s. 2½ per Cent. Consols	5 4 6
	<u>6 7 0</u>		<u>6 7 0</u>
ONALDSON TESTIMONIAL FUND :—			
To Cost of Medals	2 15 0	By Balance from last Account	0 11 5
To Balance carried forward	0 10 11	By Dividends on £72 L. & N.-W. Railway 4 per Cent. Preference Stock	2 14 6
	<u>3 5 11</u>		<u>3 5 11</u>
GODWIN BURSARY :—			
To Cash paid Bursar 1900, 1st instalment [S. K. Greenshale, A.]	20 0 0	By Balance from last Account	69 0 2
To Balance carried forward	87 18 10	By Dividends on £1030 Caledonian Railway 4 per Cent. Debenture Stock	38 18 8
	<u>107 18 10</u>		<u>107 18 10</u>
GRISSELL LEGACY :—			
To Cost of Medal	9 18 0	By Balance from last Account	16 12 11
To Balance carried forward	22 6 5	By Dividends on £300 Great Indian Peninsula Railway 5 per Cent. Stock	15 11 6
	<u>32 4 5</u>		<u>32 4 5</u>
LIBRARY FUND :—			
To Purchase of Books, Binding, &c.	156 15 3	By Balance from last Account	59 3 6
To Printing, Stationery, &c.	1 5 6	By Dividends on £2128 Midland Railway 2½ per Cent. Debenture Stock	5 0 0
To Petty Expenses	2 7 0	By Annual Grant from Ordinary Funds	100 0 0
To Balance carried forward	36 5 4	By Special Grant (Loan Collection)	25 0 0
	<u>196 13 1</u>	By Entrance Donation 1 Hon. Associate	2 2 0
		By Fines (Loan Library)	5 7 7
			<u>196 13 1</u>
OWEN JONES STUDENTSHIP :—			
To Cash paid Student 1899, 2nd instalment [J. Stewart] ..	50 0 0	By Balance from last Account	191 7 10
To Balance carried forward	243 19 2	By Dividends on £2128 Midland Railway 2½ per Cent. Debenture Stock	50 8 7
	<u>293 19 2</u>	By Dividends on £1100 Great Western Railway 5 per Cent. Consolidated Stock	52 2 9
			<u>293 19 2</u>
PUGIN MEMORIAL FUND :—			
To Cash paid Student 1900 [J. McLachlan]	40 0 0	By Balance from last Account	6 13 8
To Cost of Medal	1 9 6	By Dividends on £1070 L. & N.-W. Railway 4 per Cent. Preference Stock	40 11 5
To Balance carried forward	5 15 7		<u>47 5 1</u>
	<u>47 5 1</u>		
TITE LEGACY FUND :—			
To Cash paid Prizeman 1900, 2nd instalment [Percy E. Nobbs, A.]	10 0 0	By Balance from last Account	17 14 8
To Cost of extra Prizes	10 10 0	By Dividends on £1150 2½ per Cent. Consols	29 18 2
To Balance carried forward	27 2 10		<u>47 12 10</u>
	<u>47 12 10</u>		
TRAVELLING FUND :—			
To purchase of £50 Madras Railway 4½ per cent. Stock at 121	61 6 0	By Balance from last Account	10 2 11
	<u>61 6 0</u>	By Dividends on £950 Madras Railway 4½ per Cent. Stock ..	40 8 8
		By Dividend on £50 Madras Railway 4½ per Cent. Stock ...	1 1 2
		By Balance carried forward	9 13 3
			<u>61 6 0</u>
CATES LEGACY :—			
To Balance carried forward	7 1 4	By Interest on Deposit (£1500)	7 1 4

Examined with the several vouchers and found to be correct. 19th March 1902.

(Signed) { W. HILTON NASH [F.]
HERBERT A. SATCHELL [A.].

Dr.	Balance Sheet of Trust Funds, 31st December 1901.	Ct.	
To ASHPITEL PRIZE FUND:—	£ s. d.	£ s. d.	
Capital—20 Shares in the Architectural Union Company, Limited, at £14 per Share	280 0 0	By Government and other Securities for total value of	9876 17 7
Balance at credit of Revenue Account	16 2 0	By Balance Travelling Fund	9 15 3
To CHARITABLE FUND:—		By Cash in hands of Bankers	438 11 2
Capital—£200 10s. 2½ per Cent. Consols	195 14 9		
Balance at credit of Revenue Account	1 2 0		
To DONALDSON TESTIMONIAL FUND:—			
Capital—£72 L. & N.-W. Railway 4 per Cent. Preference Stock	89 0 0		
Balance at credit of Revenue Account	0 10 11		
To GODWIN BRISARY FUND:—			
Capital—£1030 Caledonian Railway 4 per Cent. Debenture Stock	1344 13 6		
Balance at credit of Revenue Account	87 18 10		
To GRISSELL LEGACY FUND:—			
Capital—£300 Great Indian Peninsula Railway 5 per Cent. Guaranteed Stock	513 14 10		
Balance at credit of Revenue Account	22 6 5		
To LIBRARY FUND:—			
Balance at credit of Revenue Account	36 5 4		
To OWEN JONES STUDENTSHIP:—			
Capital—£2128 Midland Railway 2½ per Cent. Debenture Stock	£ s. d. 1773 0 0		
£1100 Great Western Railway 5 per Cent. Consolidated Stock	1900 12 0		
Balance at credit of Revenue Account	3673 12 0		
To PUGIN MEMORIAL FUND:—			
Capital—£1070 L. & N.-W. Railway 4 per Cent. Preference Stock	1342 12 6		
Balance at credit of Revenue Account	5 15 7		
To TITE LEGACY FUND:—			
Capital—£1150 2½ per Cent. Consols	1109 1 6		
Balance at credit of Revenue Account	27 2 10		
To TRAVELLING FUND:—			
Capital—£1000 Madras Railway 4½ per Cent. Stock	1328 8 6		
To CATES LEGACY:—			
Balance at credit of Revenue Account	7 1 4		
	<u>£10325 2 0</u>		<u>£10325 2 0</u>

Examined with the several vouchers and found to be correct. 19th March 1902.

(Signed) { W. HILTON NASH [F].
HERBERT A. SATCHELL [A.].

SCHEDULE OF PROPERTY.

	£ s. d.	£ s. d.
Furniture as per last year's Schedule	2514 3 6	
Additions in 1901	54 2 0	
	<u>2568 5 6</u>	
Less Depreciation	64 5 6	
		2504 0 0
Printed Books		5300 0 0
Oil Paintings		3300 0 0
Lithographs, Prints, &c.		400 0 0
Water-colours		600 0 0
Models, Plaster Busts, &c.		145 0 0
Marble Busts		300 0 0
		<u>£12544 0 0</u>

The Council submit an Estimate of Income and Expenditure of Ordinary Funds for the year ending 31st December 1902, exclusive of Entrance and Final Examination Fees.

Estimate of Income and Expenditure for Year ending 31st December 1902.

EXPENDITURE.	£ s. d.	INCOME.	£ s. d.
Rent, Lighting, and Warming	1065 0 0	Subscriptions and Arrears	4800 0 0
Salaries	1315 0 0	Dividends on Stocks and Shares and Interest on Deposit	390 0 0
General Printing, Stationery, Postage, and Petty Expenses	550 0 0	Account	260 0 0
General Meetings, Exhibitions, &c.	255 0 0	Sale of Publications (other than JOURNAL and KALENDAR)	
Housekeeping (including Office Attendant)	155 0 0	JOURNAL and KALENDAR—	
Advertisements	55 0 0	Sales	100 0 0
Examination Expenses	420 0 0	Advertisements	560 0 0
General Repairs	100 0 0	Use of Rooms	85 0 0
Fire Insurance	25 0 0	Examination Fees—	
Medals and other Prizes	160 0 0	Statutory	25 0 0
Grant to Library	100 0 0	Preliminary	700 0 0
Grant to Architectural Association	100 0 0	Intermediate	450 0 0
JOURNAL	1100 0 0	Final (Extra Fees)	140 0 0
KALENDAR	165 0 0		
Contributions to Allied Societies	285 0 0		
Miscellaneous Expenses	235 0 0		
Legal and Accountants' Charges	75 0 0		
Estimated Balance of Income over Expenditure	<u>1150 0 0</u>		
	<u>£7510 0 0</u>		<u>£7510 0 0</u>

REPORT OF THE HON. AUDITORS.

To the President and Council of the Royal Institute of British Architects,—

In issuing our report on the Accounts of the Royal Institute for the year 1901 we have the pleasure to state that the books have been well and accurately kept ; and, having checked the vouchers and receipts with the books, we find all in good order.

With regard to the Revenue Account there appears to be a balance in hand of £1,330. 7s. 7d., an amount which is partly accounted for by there having been no special expenditure during the year.

On the Capital Account the sum of £1,119. 18s. 11d. has been invested during the year, thus bringing the total amount of Investments up to £10,000. 9s. 5d., which must be considered satisfactory. We are particularly glad to see that the sum of £1,000 has been set aside to start a Building Fund, and we hope this may be continued.

We regret to note that the class of Fellows, and, consequently, the Fellowship Subscriptions, have not increased in recent years in due proportion to the increase in the Associate class. While two years ago there were 620 Fellows, last year there were only 621, and in the current year there are only 617 ; so that during the last two years there has been a falling-off of three Fellows. During the same period the number of Associates has increased from 1,013 to 1,071.

The class of Honorary Associates has unfortunately also remained practically stationary during these years.

However, in conclusion, we must heartily congratulate the Institute on the state of its finances, and we trust that its present prosperity may continue.

26th April 1902.

(Signed)

{ W. HILTON NASH.
HERBERT A. SATCHELL.

DISCUSSION OF THE ANNUAL REPORT.

Mr. JOHN SLATER, B.A.Lond., *Vice-President*, in the Chair.

During the proceedings the Chairman announced that the President very much regretted that he was unable to be present at the Meeting.

The adoption of the Report was formally moved by the Chairman, and seconded by the Hon. Secretary.

Mr. Wm. WOODWARD [A.] commented upon the absence of the Auditors' Report from the document before them, and called the attention of the Council to the fact that the Companies Act of 1889 required that the Auditors' Report should be read at the annual general meeting of bodies within the Act.

At the request of the Chairman, the Secretary then read the Auditors' Report printed above.

Mr. WOODWARD, referring to the statement as to the number of subscribing members, said that last year the Council lamented the fact that there was only one extra Fellow, but now they had to account for the diminution of four Fellows, and that in all classes there was only a total addition of 37. What was the reason for that falling-off in the Fellowship, and for the general apathy which distinguished the Institute from all other kindred institutions? The meetings, for instance, of the Surveyors' Institution were characterised by an interest, by a full attendance of members, by a full attendance of Members of Council, which quite distinguished it from the Royal Institute. The speaker went on to remark upon the low estimation in which architecture and architects were held by the public.

At last Saturday's Royal Academy Banquet, although the President of the Institute was there, and although the Institute numbered Royal Academicians amongst its members, not one single reference was made to architecture at that banquet. Again, take the announcement made that evening that the Royal Gold Medal was to be given to a distinguished architect. Instead of having the room full to recognise that fact, the Meeting bore a funereal aspect which he could not account for. Members seemed to shrink from coming to the meetings and giving each other the benefits of community of thought and even instances of trials and difficulties which occurred in their professional practice. There was a reference in the Report to Mr. Brydon's design for the new Government buildings ; and on page 482 of the JOURNAL for the 27th July 1901 he found these words : "The Council would most respectfully urge His Majesty's Government to appoint an architect of repute and in sympathy with the late J. M. Brydon's artistic ideals to carry out the approved design." Of course, that communication was made with the idea that the Government would ask the Council of the Institute to appoint a gentleman of repute who was in sympathy with Mr. Brydon's ideas. Although well intentioned on the part of the Council, to his mind it seemed an endeavour to force upon the Government someone who, in the opinion of the Council, would understand Mr. Brydon's intentions. He

ventured to think that those designs were not advanced enough for any architect who would have been appointed by the Institute to be in sympathy with them any more than the gentlemen who had been nominated by the First Commissioner of Works. Those gentlemen, he believed, were capable of carrying out those designs with as much feeling, as much sympathy, and as much regard to accurate detail as any man whom the Council could have appointed. He should like to know the result of Mr. Leonard Stokes's communication to *The Times* calling attention to the alteration in Mr. Brydon's design by the omission of certain roofs and the prominence of an open balustrade, which he very properly thought would be detrimental to the architectural effect of the building. The reference in the Report to Liverpool Cathedral recalled to his mind that the Council had lately taken steps to prevent self-advertisement on the part of the members. He had himself complied with their request to remove a small board which he had put on a building in course of execution with his name attached to it. He removed the board because, on consideration, it did seem to him to lower the dignity of the profession. One saw, however, throughout the City of London, great boards with F.R.I.B.A. in large letters appended to names of members of the Institute, and he thought if one member responded to the invitation to take down such objectionable boards the Institute should make it perfectly clear—so as to be fair—that any member of the Institute who placed his name upon a board outside a building in course of erection should be considered guilty of unprofessional conduct. The Surveyors' Institution were now preparing some rules which would prevent a good deal of that sort of abuse among members of their body. The Council of the Institute had taken very proper steps to prevent self-advertisement and self-assertion, but he would call their attention to the matter of the Liverpool Cathedral. In *The British Architect* of last year there appeared a series of letters signed by prominent members of the Institute, advocating the claims of the President to the erection of the new cathedral upon a new site. Not only did they do that, but two or three of them urged that the fact that Mr. Emerson was the President of the Institute should be a sufficient recommendation to the Liverpool Committee to employ Mr. Emerson to act as architect. He found, too, that the Council itself made a communication to the Committee, which appeared in the Institute JOURNAL of 21st December 1901. This was an extract: "In the first place the Council of the Royal Institute regret that a competition for the Liverpool Cathedral having already taken place, and a design selected under competent advice, it should have been thought necessary to inaugurate another competition." If that was not veiled advertisement, he did not know what advertising was. Coming to the report of the Art Committee, he noted that that Committee had written to the Dean of St. Paul's urging the public exhibition of the designs for the decoration of the drum of the dome of that cathedral. He gathered that the Dean had not promised that those designs should be exhibited, and he was very glad that that was so, for he could conceive nothing more unfortunate than that a man like Sir William Richmond, who had carried out the finest mosaic decoration in this or any other country, should exhibit his cartoons to the criticism of gentlemen many of whom had the most absurdly restricted notions as to what constituted artistic decoration. He now came to another very important subject, and, although it was one personal to the President, he asked Mr. Emerson to believe that it was not personal to him as a gentleman, but only as regards its effect upon the interests of members of the Royal Institute. On page 57 of last year's Report [*Supplement*, 27th April 1901], he found these words: "The Council have the pleasure to record the fact that the

President, Mr. William Emerson, is a member of the advisory sub-committee of the General Committee on the question of the National Memorial to Her late Majesty." The majority of the profession certainly supposed that when the President was appointed the welfare of the profession would be looked after; but what was the result? Five gentlemen only were selected by the Committee for the competition. As to the outcome of the competition he had nothing to say. The selection of Mr. Aston Webb's designs was a very wise one, for most certainly they were the best. Apart from that, however, he asked the Meeting whether the selection of five architects was a course which they could have anticipated from the President, who should look after the welfare of the general body of members.

The CHAIRMAN pointed out that Mr. Emerson was only one of the advisory committee.

Mr. WOODWARD: Yes; but did he exercise all the power that one member of the body could exercise in favour of the welfare of the Institute by advocating a more extended competition among members of the profession? That was the question he would like to put to the President. He was glad to see the reference to the prosperous financial condition of the Institute. He hoped that that prosperity would continue, and that they would be able to do what the Surveyors' Institution had done—build their own premises with their own funds, so that they might have an adequate place to meet in. Coming to the report of the Literature Committee, as regards the Library, he was glad to see that the improvement in the number of readers and borrowers was maintained, and that the work of the Librarian, the Library, and the interest taken by members in it, were entirely satisfactory. The Science Standing Committee's report might be described, he thought, as the narration of ideas exquisitely tentative with prospects of realisation profoundly remote. The report of the Practice Standing Committee brought to the front again their dear old friend, the Conditions of Contract. When should they finish the Conditions of Contract? He should like to ask Mr. Hall whether there was a prospect of a set of conditions being issued by the Institute which had been agreed to by the Association of Master Builders or the Builders' Institute, or in what position they stood with regard to those conditions. Coming to the finances, he found that in the Schedule of Property the oil-paintings had increased in value. In 1901 they were valued at £1,800, and in 1902 at £3,300, an increase of £1,500. Then there was another marvellous increase in the value of the marble busts. In 1901 they were worth £150, and in 1902 they are put down as worth £300. He should like to know what had brought about this increase in value.

The CHAIRMAN explained that the marble busts of Wren and Inigo Jones were only presented last year, and so were not included in the previous valuation. As to the increase in the valuation of the oil paintings, the portraits of Mr. Penrose and Professor Aitchison were now included in the Schedule for the first time, and the amount at which they were valued for the Institute was £750 each, which accounted for the £1,500 extra.

Mr. E. W. MOUNTFORD [F.] wished to explain that when the Art Committee suggested to the Dean of St. Paul's the desirability of exhibiting Sir William Richmond's designs for the decoration of the dome, they had in mind that the late Mr. Burges's design for the same decoration was exhibited, and the late Lord Leighton's design was also exhibited, and on each occasion the exhibition had the result of stopping the decoration. They were in hopes that something like that might happen again.

Mr. HERBERT A. SATCHELL [A.], referring to the ventilation of the meeting-room, said he had spoken last year of the serious risks to which the elder members were subjected in sitting in certain parts of the room at their meetings, and the President had promised to see what could be done. He (Mr. Satchell) very appreciatively recognised that a

good deal had been done in providing the curtains for the back windows; but, despite this, there were very few seats in the room absolutely free from draught. He had seen members change their seats two or three times in a meeting in order to get out of the draught, which absolutely chilled one's backbone. He commended the subject once more to the Council. Another matter referred to last year was the electric light. During the session now passing they had again endured the purgatory of the electric light blazing in their eyes after a tiring day. He hoped to hear from the Council that the installation of the improved lighting was progressing.

Mr. H. HARDWICKE LANGSTON [A.] said that he observed in last year's Report that Mr. Herbert Spurrell would represent the Institute at the meetings of the Royal Institute of Public Health held at Eastbourne in July of last year. He had looked through the Report but could find no mention of what Mr. Spurrell had done at those meetings, if he had done anything. What was his report? He thought they were entitled to know that, because he had contested the point as to whether Mr. Spurrell could represent the Institute, not having been appointed by the Institute but by the Council. He was, however, ruled out of order. Then he noticed that Mr. Slater and Mr. Thomas Blashill were to represent the Institute at the Sanitary Congress to be held at Manchester in September. He trusted that they would see in next year's Report some record of what their representatives had done there, and that they should not have a Report so empty of information as the present one seemed to be. The point referred to in the Report as one of the most interesting events of the year simply dealt with a matter of eating and drinking in connection with the dinner held in Glasgow. He should have looked for something more interesting than that in the annual Report of a Royal Institute. Then he noticed that a Joint Committee of the Royal Institute and the Surveyors' Institution had drafted a Bill to amend the law relating to easements of light. Could that Bill be seen? and had it been printed? Had any information been given as to what was included in that Bill? It was simply a bare statement of fact; nothing was vouchsafed as to whether what was included in the Bill could be approved by the general body of the Institute. They were told again that the Institute were taking steps for the finding of a new site for their premises; and it was pointed out that their lease could be terminated in 1904 by giving certain notice. Looking through the financial statement it appeared that their shares in the Architectural Union Company approximated to about one-third of their assets. The 263 shares they held in that Company were stated to be worth £3,643 1s. They paid rent to the extent of nearly £1,000—£935—and it behoved them, if they wished to keep up the value of their property, to get rid gradually of these shares, or it would be an unfortunate thing that it should go out to the public that the Institute contemplated leaving these premises in 1904. The Institute was the chief tenant of the building, and when it left, although another tenant might be found to supply its place, it was a matter of doubt, and certainly the shares would not be of the same value as they were now. Then there was a curious difference in the value of the shares held by the Institute and the value of the shares held by the Ashpitel Prize Fund in the same Company. Twenty shares held by the Ashpitel Prize Fund were valued at £14 per share, but the Institute shares were not valued at £14 per share.

The CHAIRMAN explained that the amounts standing against the shares were the actual cost-price in each case. The prices varied at the time of the respective purchases.

* The Report of the Joint Committee appeared in the last volume of the JOURNAL, p. 107.—[Ed.]

Mr. LANGSTON: But that is not stated in the balance sheet. It says "Assets," and it is either a statement of fact or it is not. Mr. Langston went on to refer to the advertisement in the *Supplement* headed "Papers from the JOURNAL," and asked whether the authors of those Papers derived any profit from their sale.

The SECRETARY stated that they were overprints or reprints from the JOURNAL; and that the Institute alone derived any profit from their sale.

Mr. E. A. GRUNING [F.] said that as a member of the Joint Committee on the Law of Light, he had been requested to reply to the question as to what had been done with the Bill. The Bill was a very short one, and it had two or three main objects. One was to prevent the acquisition of easements of light by means of being able in future to give a statutory notice to anybody having lights who object to them. Owners of property would be able to look after their own interests, and prevent any ancient lights being acquired that had not been acquired up to the present time. The second was a simplification of the light and air disputes, by instituting what he might call a preliminary tribunal—each party would appoint a surveyor; a third surveyor or umpire would be appointed to go into the case and see whether *prima facie* there was any ground of complaint. The difference from the settlement in party-wall cases was that we should follow the precedent of the Factory Acts in having the decision made by the umpire alone, instead of requiring the signature of two out of three surveyors. There were many other provisions in the Act which were intended mainly to carry out those ideas. One especially was to limit the acquisition of special easements of light. There was a little difference between the Royal Institute and the Surveyors' Institution as to how the Bill should be worded. A meeting would take place at the end of this week, and he had no doubt the difference would be adjusted. The Act would be beneficial to the profession and beneficial to the community at large.

Mr. WOODWARD: I suppose there will be some limit of time to the extinction of the existing ancient lights?

Mr. GRUNING: It is not proposed to extinguish the existing ones at all. It will be impossible to do so.

Mr. WOODWARD: At what period do you propose to extinguish them?—at the end of the current lease?

Mr. GRUNING: No; to prevent the acquisition of future rights.

Mr. WOODWARD asked permission to refer to a notice in one of the Journals that the London County Council proposed an amendment to the Building Act *re* the Tribunal of Appeal. He trusted that there would be no diminution of the powers of the tribunal, but, on the contrary, that they would be increased, for any addition to the powers of the Council would be most detrimental to the profession.

Mr. GRUNING said he had no official intimation as to what the proposed change of law was to be. He had reason to believe that the alteration was proposed on account of decisions which had not accorded with the views of some members of the London County Council. There was also a wish on the part of the County Council that the powers of the Tribunal should be enlarged so as to bring under their jurisdiction a great many of the cases that at present did not come within their cognisance.

Mr. HALL said that with regard to the first part of Mr. Gruning's statement he hoped that the Institute Council would take such action as might be necessary to prevent the curtailment of the independence of the Tribunal.

Mr. W. HILTON NASH [F.] referred to the extremely satisfactory circumstance that they had received £1,248 from examination fees. That was a large sum, and helped largely to swell the balance they were so happily able

to declare. He thought that the Institute receiving such a large sum in fees, the great unpaid ought to be considered. The examiners, he believed, were all unpaid. He should like to hear from the Chairman whether the question had ever been considered whether the examiners should be paid or not. The Institute must also be complimented on the great success of the *JOURNAL* and the *KALENDAR*, which had produced £627 17s. 2d. He was sure that was greatly due to the energy of the Secretary and the Assistant Editor who conducted these publications.

The CHAIRMAN, replying to Mr. Woodward's criticism of the action of the Council in reference to Mr. Brydon's designs, said Mr. Woodward was mistaken in thinking that the Council advocated or wished to appoint any person to carry out Mr. Brydon's designs. They simply wished the Government to appoint someone, and suggested that they should do so. There was not the slightest suggestion that the Council wanted to make the appointment. With regard to the Queen Victoria Memorial—the President was not here to speak for himself—but from his (Mr. Slater's) point of view it would have been absolutely improper for him, as one single member of that Committee, to have given any information as to what took place at the meeting of that Committee. The action of that Committee was the action of the Committee as a whole. With reference to Mr. Langston's question as to the report which Mr. Spurrell sent of the meeting of the Institute of Public Health, he believed Mr. Spurrell attended, and reported that he attended, and that was all. Many public bodies held congresses—such as the Sanitary Institute, the Iron and Steel Institute, and others, and they generally asked other bodies to send a representative—as a matter of compliment. These representatives attend and take part in the proceedings, but it often happens that no particular action can be taken, and they simply attend as representing the body that appointed them. He should be sorry if Mr. Langston was led to suppose that at the Sanitary Congress in Manchester there would be any definite action taken by Mr. Blashill or himself. He had not the least idea what the proceedings would be, or what questions would be considered. He hoped to attend as representing the Institute, but it was quite possible that he and Mr. Blashill might only have to report that they attended. With regard to the Architectural Union shares, rightly or wrongly the accountant considered that the price to put down for the shares was what was paid for them. The shares varied in price from time to time; and it happened that the shares presented to the Institute as the Ashpitel Prize Fund cost £14 a share, and that those they purchased for the Institute did not cost so much, and therefore they were only put down at that figure. If the value of the shares rose so much the better for the Institute, but it certainly seemed safest to put down simply what they paid for them. No intimation had been received from the County Council as to any alteration in connection with the Tribunal of Appeal, but the Institute might certainly trust the Council to oppose to the utmost of its power any attempt to diminish the power and influence of that Tribunal. With regard to the payment of examiners, the question had been seriously considered on more than one occasion; and the whole body of examiners themselves agreed that they would rather do the work as honorary members than be paid the extraordinarily small sum which would accrue to each of them if even a considerable amount was allocated to the Board of Examiners. The whole matter of the lighting of the meeting-room had been gone into, and they were going to attempt to light the room entirely by reflected light from the ceiling, so that with the exception of the lights round the dome the whole of the lamps at present used would be in abeyance.

The motion for the adoption of the Report was then put and carried unanimously.



9, CONDUIT STREET, LONDON, W., 10th May 1902.

CHRONICLE.

The Royal Gold Medal 1902.

The Special General Meeting called pursuant to By-law 64 for the purpose of electing the Royal Gold Medallist for the current year was duly held on the 5th inst., when the Chairman, Mr. John Slater, moved, "That, subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of architecture be presented this year to Mr. Thomas Edward Colcutt for his work as an architect." The motion was seconded by Mr. E. A. Gruning [F.]. Mr. Wm. Woodward, speaking as an Associate, said that he felt sure he should have the concurrence of the majority of the Associates in strongly supporting the nomination of Mr. Colcutt as the proposed recipient of the Royal Gold Medal. Mr. Colcutt was an architect, using the term in its fullest sense. He was courteous, painstaking, had a thorough knowledge of business, and withal was thoroughly artistic. His works were distinguished by individuality of conception, and particularly by individuality of detail. Mr. Colcutt had succeeded in embellishing London and the country with buildings in which there was an absence of the peculiarities and eccentricities so common nowadays, and it was the greatest possible satisfaction to find that the Council had recognised his ability.—The resolution was carried by acclamation.

The Annual Elections: New Nominations.

The following members have been nominated to serve on the Council during the ensuing year of office, the nominations having been made by Fellows and Associates in accordance with By-law 30:—

As Member of Council: ALFRED WILLIAM STEPHENS CROSS, B.A.Cantab.—nominated by D. B. Niven, Herbert Wigglesworth, Sidney R. J. Smith, John Murray, *Fellows*; S. B. Russell, C. E. Hutchinson, Henry A. Saul, *Associates*.

As Associate Member of Council: SAMUEL BRIDGMAN RUSSELL—nominated by Alfred W. S. Cross, R. Stephen Ayling, Arnold Mitchell, Sidney

R. J. Smith, *Fellows*; Sydney W. Cranfield, Herbert W. Wills, E. Harding Payne, *Associates*.

The Coronation: The Institute Decorations.

The Chairman at the General Meeting last Monday announced that in view of the general decorations on the occasion of His Majesty's coronation the Council of the Institute had requested Mr. G. F. Bodley, R.A. [F.], to take in hand the decoration of the Institute premises.

New Contract Form with Quantities.

At the conclusion of the ordinary business of the Annual General Meeting last Monday, the Chairman brought forward the proposal [see *last Supplement*] to issue a new Contract Form for use where Quantities form part of the Contract. The proposed Form is practically identical with the existing Form, certain modifications in the latter having been made by the Practice Standing Committee to meet the requirements of the new Form. The material parts of the clauses affected are the following, the alterations and additions being printed in italics:—

1.—The works shall be carried out in accordance with the directions and to the reasonable satisfaction of the Architect, in accordance with the said Drawings and Specification and *Bills of Quantities*, and in accordance with such further drawings, details, and instructions in explanation of the same as may from time to time be given by the Architect. . . . The Contract Drawings and Specification and the *priced Bills of Quantities* shall remain in the custody of the Architect, and shall be produced by him at his Office as and when required by the Employer or by the Contractor.

3.—The Contractor shall on the signing hereof furnish the Architect with the *fully priced Bills of Quantities* for his use or that of the Surveyor appointed as in Clause 13 hereof, and for the purposes only of this Contract.

Clause 13.—The penultimate sentence to read:—

The variations shall be valued at the rates contained in the *priced Bills of Quantities*, or, where the same may not apply, at rates proportionate to the prices therein contained.

27.—The words "Prime Cost" or the initials P.C. applied in the Specification and *Bills of Quantities* to goods to be obtained and fixed by the Contractor, shall mean, unless otherwise stated in the Specification or *Bills of Quantities*, the sum paid to the merchant after deducting all trade discount for such goods in the ordinary course of delivery, but not deducting discount for cash, and such sum shall be exclusive of special carriage, the cost of fixing, and Contractor's profit.

28.—The commencement of the clause to read:—

The provisional sums mentioned in the Specification and *Bills of Quantities* for materials to be supplied or for work to be performed by special artists or tradesmen, &c., &c.

Slight changes are also required in the preamble and agreement clauses.

The CHAIRMAN, in introducing the subject, said that the Council had had many applications from members asking if a form of building-contract could not be framed suitable for use where quantities were made part of the contract. The matter was referred to the Practice Standing Committee, and they reported that there was no necessity to draw up any fresh conditions, but that the clauses of the existing form, with slight amendment, would be suitable

for the new conditions. The amendments needed for the proposed new form were set out in the last *Supplement*. He would now formally move from the chair: "That the Institute sanction the issue of a Form of Agreement and Schedule of Conditions for Building-Contracts for use where Quantities form part of the contract."

Mr. DOUGLASS MATHEWS [F.] said that the Practice Standing Committee had taken this matter into serious consideration, and that with the few amendments proposed they thought the desired end would be obtained. Without attacking the conditions all through and making a special thing of it, these few alterations, they thought, would entirely meet the matter. It seemed to him that they might be put for the ordinary form of conditions, striking out the amendments where not required, but that was a matter of detail.

Mr. C. H. BRODIE [A.] said that, as one of the Hon. Secretaries of the Practice Committee, it had fallen to him to hunt up the report of the case of *Hobbs v. Turner*, a very important case upon which the Committee had reported to the Council. The case was fought upon the Institute form of contract, and he came to the Institute naturally expecting to find a report of it in the Library. He was disappointed. There was no report of the case in the Institute JOURNAL, nor in the Library or any other part of the building. He had to go to the Law Institution, and by the courtesy of the librarian there he was able to turn up the case of *Hobbs v. Turner* as it was reported when it came before the Divisional Court. The case went to the Court of Appeal, and a report appeared in the following number of the JOURNAL.* The report which was handed to him at the Law Institution was in the book which is known as the *Times Law Reports*. He glanced through the volume, and found that the cases reported were very largely what might be called practical, everyday matters. He went to a bookseller's shop in Chancery Lane, and found that they had a copy of the publication from the commencement, some 17 volumes, and the price of the whole was 16 guineas. It was, of course, a current publication, and the price per annum delivered was 25s. He therefore ventured to suggest to the Council that it might add to the usefulness of the Institute if members could come there and turn up the report of a case which had been fought on a form of contract issued by the Institute. He was told—and he regretted to report it to the meeting—that the Council could not see their way to the expenditure of 16 guineas and an annual expenditure of 25s. on the *Times Law Reports*!

Mr. HILTON NASH [F.] said he thoroughly endorsed Mr. Brodie's remarks. The Practice Committee, of which he was a member, often had letters from architects in the country asking for advice on matters of detail—perhaps a difficulty with a builder on a contract, or something of that kind. But they were unable to give any advice; they had no authority. It would be a good thing if a branch of the Practice Committee, or some committee specially formed, a sort of Advisory Committee, could be appointed to advise architects in town and country on these matters. It seemed to him that the country members paid their guineas and, as they said, got nothing for it. It was different with London members, who could come to the Institute and confer with their professional brethren, and get all the information they wanted. But with people in the country, a long way from any centre, it was very difficult for them to get advice. He thought if the Institute could assist them occasionally with advice, it would not only be a benefit to them, but a benefit also to the Institute.

Mr. WOODWARD regretted with Mr. Brodie that the Council did not see its way to make this expenditure of 16 guineas for the back numbers of the *Times Reports*. It

* 25th January 1902, p. 147.

would be within the recollection of some among the members of the Institute that some years ago, at the suggestion of the late Secretary, Mr. William H. White, and with the assistance of Mr. Cates, he had contributed to the JOURNAL of the Institute reports of all law cases which affected the interests of the profession. He extracted the reports from the *Times*—which they all knew contained excellent reports of nearly all cases, though probably not many reports affecting the interests of the profession—and he commented upon those reports with the information he happened to have bearing upon similar cases, dealing with them from a layman's point of view, which he thought would be of interest to general members. He made one or two reports upon some Building Act cases, and commented, it appeared, somewhat too freely upon the action of a district surveyor, with the result that an intimation was conveyed to him that the editorial part of the law cases connected with the JOURNAL had better be relinquished by him. Mr. Woodward went on to suggest that the reports of legal cases affecting the profession should be extracted from the *Times* and other journals and pasted in a book kept in the Library, so that every member could have access to them.* If the reports were given in the JOURNAL, they should be given immediately after they appear in the *Times*, and not weeks and weeks after.† He thought Mr. Brodie's was an excellent suggestion; and whether they thought it desirable or not to buy up the back numbers of the *Times Reports*, he trusted that, at any rate, they would start purchasing for the Institute the *Times Reports* as they appeared, and have them in the Library for access to all members.

The CHAIRMAN said that the reason why the Council decided not to buy the back numbers was a two-fold one. First, scarcely a five-hundredth part of the reports had any reference at all to architectural cases; secondly, they were so pressed for room in the Library that the Council hardly thought it advisable to accumulate a large number of volumes of which the proportion applicable to the Institute was so very small. If, however, it appeared to be the wish of members that these volumes should be taken in future, 25s. a year was a very small expenditure, and the Council would probably authorise it to be done. With reference to Mr. Hilton Nash's remarks regarding country members who required advice in professional matters, he should mention that there was already a Professional Questions Committee of Council, and Mr. Nash would be astonished at the enormous number of questions the Committee had to consider and give answers upon. He was bound to admit that it too frequently happened that they were consulted on matters upon which a man ought to go to his solicitor. In a large number of cases the Committee went into the matter carefully and gave advice to the persons who asked for it which they were often able to act upon, but the Council was not in any sense a body to whom legal questions should be referred, and they could not be expected to give advice on legal matters when it often happened that they had not got the whole case before them and might go quite wrong.

* For the information of members it should be stated that the course suggested by Mr. Woodward is regularly carried out in the Library. The *Times* cuttings book contains the legal cases bearing on building and professional matters which have been reported in the *Times* for many years past.—[Ed.]

† Exigencies of space compel occasional postponement of these reports. It should be noted, too, that there are two-, three-, and during the recess four-week intervals between the JOURNAL numbers. A case a few weeks late is none the less valuable for reference, the decision holding good for all similar issues until set aside by a Superior Court.—[Ed.]

Mr. A. SAXON SNELL [F.] said that before the resolution with regard to the form of building-contract was put to the meeting, he should like to make one or two suggestions. He did so with diffidence because he was one of those who did not use the Institute form of contract. In common with those who did, he had difficulties to contend with from time to time which had to be overcome. This was one. He ventured to suggest that the form of the inclusion as set forth in the first few lines would be a great mistake. The clause ran: "The works shall be carried out in accordance with the directions and to the reasonable satisfaction of the architect in accordance with the said drawings and specifications and bills of quantities." Architects did not, as a rule, take out their own quantities. They were taken out by another man, who interpreted their drawings and specifications to the builder. Under the above clause the architect made himself responsible for that other man's interpretation. For the last fifteen years it had been a custom in his office to make the quantities part of the contract, but only by implication, so to speak; that is to say, they had clauses in the contract which referred to the bills of quantities, and which enabled them in case of doubt as to the intent and meaning of any part of the specification or drawings to consult the quantities. It seemed that in that the distinction lay—it was merely a reference to quantities. He would give an illustration. Many a time a builder had come to him and said: "Such and such a thing is not in the quantities; I want an order for it." He (Mr. Snell) replied: "No, I will not give you any order for it; but you may bring it up as a claim in due course; I will deal with the matter in my capacity as arbitrator, not as architect." His reason was this. He (Mr. Snell) did not profess to have such a knowledge of quantities as to enable him to say offhand whether a quantity surveyor had rightly interpreted the specification. Therefore he preferred to leave the matter so that he could discuss it in the presence of the quantity surveyor, either at once or when the accounts were made up, as a claim, and then he was enabled to say to the quantity surveyor: "Has he a right to make this claim? is your interpretation of my specification what I intended?" Then the matter could be dealt with fairly and with knowledge, otherwise one would have to be continually interpreting the quantities, which he thought was a dangerous thing for an architect to do.

Mr. EDWIN T. HALL [F.] thought there was a great deal in some of these objections to the phraseology. He must apologise to the Meeting that he had not had time to look at the proposed alterations. But there was the difficulty Mr. Snell pointed out, and it was rather a serious one. It would be rather an embarrassing thing if a builder carried out something in accordance with the quantities which was different from the architect's intent and possibly from his specification, because he was rather afraid that the architect could not call upon him to undo that work without paying him for it. He thought it would be better for this document to go back for reconsideration. The intention of the Practice Committee probably was that the quantities as such should be adjustable at the end on the give-and take principle of paying the contractor for actually what he had done, and in that sense they formed the basis of the contract; but he did not think it was in this particular clause that the phraseology should go. The buildings, he thought, should be carried out in accordance with the specifications and drawings; but there might be some other clause which dealt with the question of quantity. There was this further difficulty. It had been decided by a Court that if a man agreed to carry out the works in accordance with the drawings, the specifications, and the quantities, although there might be nothing in the quantities representing something that was in the others, he was still bound to carry out the work specified and shown without being paid for it, and he did not think that was

the intention of a form of contract which was to make the quantities part of the contract.

Mr. J. DOUGLASS MATHEWS [F.] confessed that he did not follow the remarks of the last speakers, because it was left to his Committee to deal with the gross quantities as forming part of the contract, and therefore under those circumstances it appeared to them necessary that the bill of quantities should be incorporated. The use that they might be put to afterwards would rest with the architect, with the assistance of the quantity surveyor. What his Committee felt was this, that the surveyor would be an acknowledged party, not to the contract, but an acknowledged person in connection with the contract. Therefore those quantities, whether prepared by the architect or by the surveyor, would form, together with the drawings and specifications, the basis of the contract; and therefore, if the architect on examination found that there were certain things in the bill of quantities that were not in the specification, or put in a way that he did not desire, it would be for him to say, "I will not have this, that, or the other carried out." Then if the specification and bills of quantities differed, and the specification was worked to, it would be the duty of the quantity surveyor to say what was added and what was omitted. It was for that reason that this bill of quantities should form part of the contract. The builder would know exactly what he had to do. What he had done extra he would be paid for; but the whole essence seemed to be that the bills of quantities should be acknowledged as part and parcel of the contract in common with the specifications and drawings. He saw no other way of getting out of it except to embody what he thought was desired should be embodied.

Mr. WOODWARD said that, as he understood the proposition, these additions were meant to be substituted for or added to the present general conditions of contract when the quantities were made part of the contract.

The CHAIRMAN said that no doubt the better plan would be to print certain copies quite separately. The chances were that they should not require anything like the same number, where quantities were part of the contract, as they wanted of the others.

There being no further opposition to the proposal, the motion was put from the chair and carried—Mr. Hall and Mr. Saxon Snell dissenting.

Special Election to Fellowship.

At the meeting of the Council on the 5th inst., the following gentleman, being President of an Allied Society, and found by the Council to be eligible and qualified for membership under the Charter and By-laws, was, under the proviso to By-law 9, elected to the Fellowship of the Royal Institute—viz.

HORATIO KELSON BROMHEAD, *President of the Glasgow Institute of Architects*, of 243, St. Vincent Street, Glasgow.

The Institute and the Telephone.

At the Institute Meeting last Monday Mr. H. D. Searles-Wood [F.] suggested that the Institute should be connected with the telephone, on the cheap postal rate of £5 for the telephone and 30s. for the messages. The expense would be comparatively trifling, as each member using the telephone would pay for his individual message, and the Institute would not be responsible for messages received from the members' offices to

the Institute. It would be a great convenience to members attending the various committees to be able to communicate with their business premises.—The Secretary said that he had gone fully into the question, but he found that hardly anybody with whom he was usually in correspondence was on the telephone. Very few members of the Institute seemed to be in connection with it.—Mr. Woodward said he was one of the unfortunate individuals who were on the telephone, and he could only say that if they installed a telephone at the Institute he should move that the salary of the Secretary be increased!

The late Thomas Oliver [F.].

Mr. Thomas Oliver, who died on the 24th ult., aged seventy-eight, had been a Fellow of the Institute since 1866. He was head of the firm of Oliver, Leeson & Wood, of Newcastle-on-Tyne, and was one of the founders of the Northern Architectural Association, of which he was many years secretary and twice president. The *Builder* of the 3rd inst. has a long list of important works carried out by his firm in the north of England and elsewhere.

The Architectural Association Building Fund.

Under the heading, "The Training of Architects," the following letter addressed to the editor appeared in *The Times* of the 26th ult. :—

56, Great Marlborough Street, W., 24th April.

SIR,—The Architectural Association of London has for fifty-four years devoted its energies to the education of architects, and it is now the principal architectural teaching body in the United Kingdom. The present membership is over 1,400, including most of the leading architects of the day.

For forty years instruction in its classes was given voluntarily by its members, but the work during that period had so increased that in the year 1891 reorganisation became necessary, and the school was remodelled under a salaried staff. Its curriculum now embraces all branches of study essential to architectural practice. Last session 230 individual students attended the various classes and studios.

The subjects treated in the Evening School of Design are set and voluntarily criticised by well-known London architects, while the advisory council of the day school includes almost all the architect members of the three Royal Academies of the United Kingdom. This educational work has quite outgrown the premises in which it is being carried on, and the future welfare of the Association depends upon its obtaining extended accommodation without delay.

About £20,000 is needed to provide the building, including equipment and fittings.

Owing to the greatly-increased interest now being taken in these subjects by the general

public, the executive committee is encouraged to appeal to all those interested in architecture for contributions to enable them to carry out their project.

No art more tends to mark the progress and greatness of a nation, and no science does greater service towards securing the health and comfort of its people. The one great aim of the Architectural Association is that students may have the best possible training both in the art and science of architecture.

The Committee will gratefully acknowledge the receipt of any donations to the building fund, which should be forwarded to the secretary of the Architectural Association at No. 56, Great Marlborough Street, London, W.

We are, Sir, yours faithfully,

W. HOWARD SETH-SMITH, *President Architectural Association.*

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MINUTES. XII.

SPECIAL GENERAL MEETING.

At a Special General Meeting held Monday, 5th May 1902, at 8 p.m., Mr. John Slater, *Vice-President*, in the Chair, with 16 Fellows (including 7 members of the Council) and 14 Associates (including 1 member of the Council), the Chairman having stated that the meeting was convened for the purpose of electing the Royal Gold Medallist for the current year, moved in accordance with notice that Mr. Thomas Edward Colclutt [F.] be elected for the honour. The motion having been seconded by Mr. E. A. Gruning [F.] and supported by Mr. Wm. Woodward [A.], it was unanimously

RESOLVED, that subject to His Majesty's gracious sanction the Royal Gold Medal for the promotion of architecture be presented this year to Mr. Thomas Edward Colclutt, for his work as an architect.

This concluded the business of the Special Meeting.

ANNUAL GENERAL MEETING.

At the Sixty-eighth Annual General Meeting (being the Twelfth General Meeting of the Session), held at the conclusion of the Special General Meeting above recorded, and similarly constituted, the Minutes of the Meeting held 21st April 1902 were taken as read and signed as correct.

The Hon. Secretary announced the decease of Thomas Oliver, *Fellow*, of Newcastle, and it was resolved that a message of sympathy and condolence be sent from the Institute to his relatives.

The Report of the Council for the official year 1901-1902, a copy of which had been previously issued to every member resident in the United Kingdom, having been submitted and taken as read, its adoption was formally moved by the Chairman and seconded by the Hon. Secretary, and the Secretary having read the Report of the Hon. Auditors, a discussion ensued, at the conclusion of which the Meeting

RESOLVED, *nem. con.*, that the Report of the Council for the official year 1901-1902 be approved and adopted.

The Chairman having announced that the list of attendances of members at the meetings of the Council and Standing Committees would be published in the next *Supplement to the JOURNAL*, the Meeting authorised the Council to appoint Scrutineers to direct the election of the Council and Standing Committees for the ensuing year of office and report the result thereof to the Business General Meeting of the 9th June.

The thanks of the Institute were accorded to Messrs. W. Hilton Nash [F.] and H. A. Satchell [A.] for their services as Auditors of the past year's accounts, and Messrs. Louis Ambler [F.] and Hubert Springford East [A.] were nominated Auditors for the ensuing year of office.

A vote of thanks was passed to the Statutory Board of Examiners for their services in connection with the Surveying Examinations, and the following were appointed to form the Board for the ensuing year:—Messrs. Arthur Ashbridge, Thomas Blashill, Arthur Crow, Percivall Currey, F. W. H. Hunt, J. Douglass Mathews, R. P. Notley, Lacy W. Ridge, Professor T. Roger Smith, H. D. Searles-Wood, Benjamin Tabberer, and Thomas Henry Watson.

The following candidates for membership were elected by show of hands under By-law 9, viz.:—

AS FELLOWS (2).

JAMES GLEN SIVEWRIGHT GIBSON [A. 1890].
HENRY WILLIAM CHATTERS, of 17, Regent Street (Cheltenham).

AS HON. ASSOCIATE.

ALFRED ARTHUR HUDSON (Wendover, Bucks).

The following candidates for membership, found by the Council to be eligible and qualified according to the Charter and By-laws, were recommended for election at the Business Meeting on the 9th June—viz.: As FELLOWS, Herbert Phillips Fletcher [A. 1895], Assoc. M.Inst.C.E., F.S.I., Cathcart William Methven, F.R.S.E., M.Inst.C.E. (Durban, Natal), Frank Worthington Simon (Edinburgh).

The Chairman formally moved the adoption of a Form of Contract prepared by the Practice Standing Committee for use where Quantities' form part of the contract, and the motion having been seconded by Mr. E. A. Gruning [F.] and spoken to by several members, it was

RESOLVED, against two dissentients, that the Institute do approve and sanction the issue of the Form of Agreement and Schedule of Conditions for Building Contracts as prepared by the Practice Standing Committee for use where Quantities form part of the contract.

The proceedings then closed, and the Meeting separated at 9.45 p.m.

REVIEWS.

SCHOOL ARCHITECTURE.

School Architecture. By Edmund M. Wheelwright. 40. Boston 1901. Price 21s. net. [B. T. Batsford, 94, High Holborn, W.C.]

The appearance of Mr. Edmund M. Wheelwright's work upon School Architecture is most opportune, coming, as it does, at a time when the question of the necessity for further legislation for the bettering of the education of the children of England is receiving so much attention.

The work is beyond doubt a great advance upon any previous publication dealing with this important subject.

Mr. Wheelwright's method of treatment is both clear and simple; no important point, helpful to either the expert or student, appears to have been overlooked. The work, in short, deals fully with the various systems of school planning and educational training as adopted by the leading Governments of Europe and the United States.

The text, accompanied as it is throughout with numerous explanatory illustrations, carefully selected and excellently reproduced, is subdivided into a number of chapters, treating in the first instance of the requirements and chief features to be looked for in a well-planned school, leading thence to the elementary school system as practised in Europe and America, including a special short treatise upon English schools and the Board of Education's Code Rules, and closing with a comparison of the various methods described.

The origin and development of secondary education follows, then a description of the particular points to be remembered in the planning of manual training and mechanical art high schools and training colleges, the author finally dealing with the questions of heating, ventilation, and sanitation, closing his work with a detailed specification of a school meeting the requirements of the United States Government.

As the work of an American it is primarily intended to aid the architect and to interest the public of that land, but the very fact of this being the case, and its dealing so fully with the United States and Continental systems, places it at once in the front rank of works of reference which can and should be consulted by the architects and public bodies of this country.

It is to be regretted that Mr. Wheelwright, having illustrated his work so copiously, has not given his readers a greater number of illustrated examples of school furniture. The few drawings given are excellent, but quite insufficient.

The work is well printed, and is bound in a pleasing tone of green art canvas. The English right of sale is in the hands of Mr. B. T. Batsford, of Holborn, and the cost is 21s. net.

ARTHUR H. RYAN-TENISON.

WESTMINSTER ABBEY.

Westminster Abbey: a short history and description of the Church and Conventual buildings, with notes on the Monuments. By Charles Hiatt. (Bell's Cathedral Series.) 80. Lond. 1902. Price 1s. 6d. [Messrs. George Bell & Sons, York Street, Covent Garden.]

The issue of this handbook, one of Bell's Cathedral Series, adds another to the list of their capitally written volumes. That the subject is a difficult one is self-evident, not only because of its antiquarian and historical associations, but also because it treats of a work of art of superlative merit. So much has been written already, and so great has been the research devoted to it, that the books enumerated in the short preface form but a part of the vast fund of information which is available, and has no doubt been drawn upon.

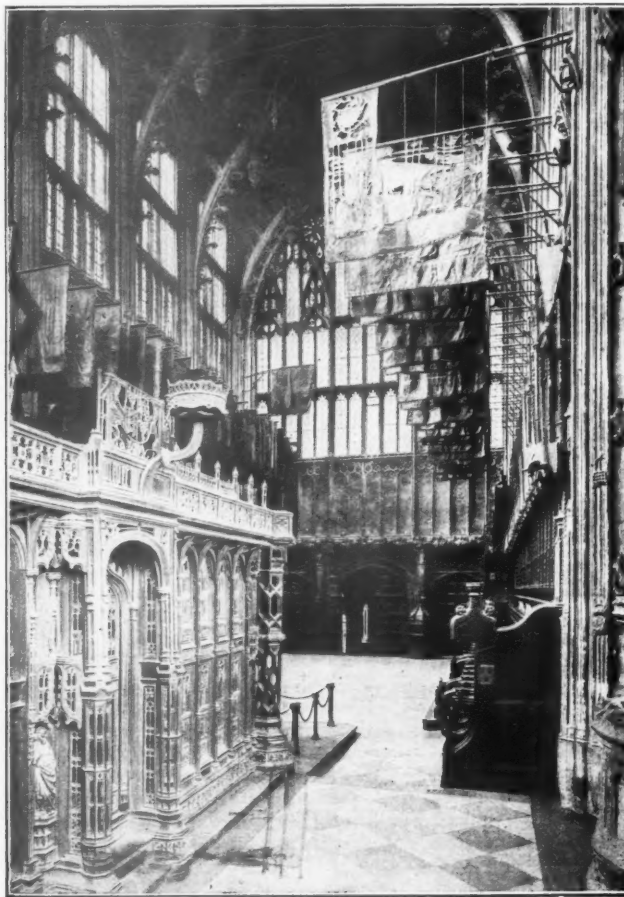
The story of the Abbey is very well told, and the descriptions of the exterior, interior, and conventual buildings judiciously arranged; the illustrations are well chosen, profuse, and very attractively reproduced. Criticisms, where indulged in, are made for the most part with discrimination, but occasionally it seems as if the author had been influenced by Mr. W. J. Loftie (acknowledgment to whom is frequently made), the value of whose writings lose so much by their invective and prejudice.

Referring to Sir Christopher Wren's work to the North Transept, recased by Sir Gilbert Scott and Mr. J. L. Pearson, the writer remarks that the former work, if somewhat incongruous, "had merit which we fail to discover in the structure which now takes its place"; a few pages further, speaking of Sir Christopher Wren and Hawksmoor's west front, he states, "that which is ancient has been so grievously altered, and that which originated in the eighteenth century is so manifestly incongruous"; and then on page 20 it is noted that repairs are going on here (October 1901). The author does not seem to be aware that these are somewhat of an extensive nature, have been in progress for a year or more, and practically amount to *restoring into more correct Gothic!* This, however, passes without comment: can it be that a *persona grata* has charge of this?

Among the illustrations are several from prints showing work which no longer exists, and these are most valuable as records and for comparison. Mr. Jewitt's print of the Chapter House when used as a Record Office, given in *Gleanings from Westminster Abbey*, has not been included, which is a pity. This shows it with its flat ceiling, tiers of presses, walled-up windows, and a stairway meandering along its walls, and if with this some account had been given of the discovery of the old features and statues, including the moulded ribs of the lost vaulting, used for walling up the window over the entrance, it would have helped to convey an idea of the patient care and labour

devoted to it by Sir Gilbert Scott, whose own published account of this, and his discoveries in the Crypt below, in the outer and inner vestibules, and in the Confessor's work south of the latter, is most fascinating reading. His restoration of the Chapter House may well be considered a *magnum opus* few have ventured to attack.

had made his continual refuge; and her figure accordingly looks down upon his grave from the east end between the apostolic patrons of the Abbey, Peter and Paul." This conveys a wrong impression, the fact being that Our Lord in Majesty is the central figure at the east end, the Virgin Mary being on the left, and the angel



S. B. Dolan & Co., Photo.

HENRY VII'S CHAPEL, LOOKING WEST.

The wonderful imagery existing inside Henry VII's Chapel is alluded to in a quotation from Dean Stanley, who describes it as "tier upon tier on every side of the chapel, some retained from the ancient Lady Chapel, the greater part the work of his own age"; but "to the Virgin Mary, to whom the chapel was dedicated, he had a special devotion. Her in all his necessities he

Gabriel on the right, and beyond to the left St. Paul and to the right St. Peter. It is rather curious to note that the order of these figures appears to have been brought about by the wish to include the Virgin Mary, and the difficulty of position of similar dignity has been got over by introducing the angel Gabriel. All the series of figures will well repay examination.

The quotation is also misleading, inasmuch as it views the architecture of the chapel as a "reminiscence of his (Henry VII.'s) exile, being learned in France by himself and his companion Fox." This, it is only fair to state, is commented upon three pages afterwards as requiring qualification, and Sir Gilbert Scott is cited to the effect "that this chapel is the richest specimen in existence of that peculiarly English style commonly known as the Tudor style, and of that very remarkable and admirable kind of vaulting known as fan tracery, which is also peculiar to England"—and we as architects know this to be the case.

Interest would have been added to the account of the chapel of St. Faith if an illustration had been given, and the remains of the altar and altar steps been pointed out. Also the bridge-way by means of which the monks passed during the night from the dormitory to the church, and the skilfully managed vaulting, two bays being sex-partite, an example of this mode as late as 1250.

The only allusion to the vaulting is "through the gloom the grim corbels of the roof groining look very weird"!

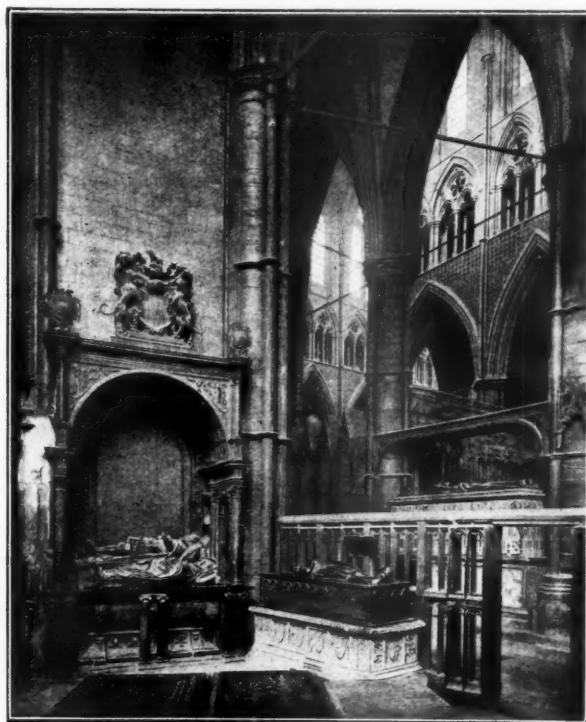
On page 40 John Loughborough Pearson is described as a "pupil of Scott." This is not so; he was articulated to Ignatius Bonomi of Durham.

Comments such as the following are out of place and only irritate: "A vile monument"; "an absurd tablet"; "a poor statue by Chantry"; "a good statue by Chantry"; "a beautiful work by Alfred Gilbert, R.A."

From the "Index to Tombs and Monuments" Robert Adam's gravestone in Poets' Corner is omitted—also in the text; and in the "General Index" we get Sir Christopher Wren and Nicholas Hawksmoor, but no Blore, Scott, or Pearson.

The plan of the Abbey and conventual buildings (partly conjectural) and the ground plan of the Abbey are very useful and distinct, and each has a scale.

W. SAMUEL WEATHERLEY.



S. D. Tolson & Co., Photo.

ST. EDMUND'S CHAPEL, WESTMINSTER ABBEY.

THE BEGINNINGS OF GOTHIC ARCHITECTURE: NORMAN VAULTING IN ENGLAND.

A REPLY.

By JOHN BILSON [F.], F.S.A.

IN his "Discours sur les origines de l'architecture gothique,"* delivered before the *Société des Antiquaires de Normandie* on 7th January 1901, M. le Comte de Lasteyrie has done me the honour of summarising and criticising the conclusions set forth in my Paper on Norman vaulting in England.† He finds it difficult to believe that the earliest ribbed vaults which I have described can possibly be as early as the dates to which I have attributed them. As the question is of considerable importance, I need scarcely apologise for adding a few words in reply to the general objections which M. de Lasteyrie urges against my conclusions, and to his special objections to the dates to which I have assigned the vaults of Durham Cathedral.

Dealing first with general considerations, I wish at the outset to express my entire agreement with M. de Lasteyrie when he says that he does not desire "contester un seul moment le rôle capital qu'ils (les architectes de l'Ile-de-France) ont joué dans la rapide transformation de l'architecture française au XII^e siècle" (p. 26). From the time when they began to develop the ribbed vault by associating with it the pointed arch (whether this date be placed at about 1125 or a little earlier) I freely admit that the Ile-de-France took the lead. The question is, however, what was the rôle played by the different provinces before that time? With the other provinces—with Anjou and Burgundy, for example—I am not now concerned. I confine myself here to Normandy and England.

I do not claim that the Normans invented Gothic architecture; indeed, in my Paper I expressly guarded myself against any such assumption. But my studies of the earliest ribbed vaults in England have led me to the conclusion that the Normans adopted and tentatively developed the ribbed vault in association with the

semicircular arch alone; that these early attempts show, both in point of style and system, complete independence of any influence from the Ile-de-France; and that, judging from the evidence hitherto presented, the earliest of these Norman vaults are earlier in date than the period of the systematic development of the ribbed vault in the Ile-de-France.

I am, of course, aware that these conclusions are opposed to the doctrine accepted by the majority of French archaeologists, which attributes the invention and development of the ribbed vault exclusively to the Ile-de-France.* It is significant that M. de Lasteyrie is inclined to believe that "il y a lieu d'amender un peu cette doctrine, et de faire, aux architectes de l'Ile-de-France, une part un peu moins exclusive dans la genèse de l'art gothique" (p. 26). He even goes so far as to admit the possibility that Gothic architecture might have appeared if the Ile-de-France had not existed (p. 27). If this view be admitted, surely there can be no objection, *a priori*, to the theory that ribbed vaults as early as, or even earlier than, those of the Ile-de-France may exist in other provinces.

What are the probabilities of the case, apart from any precise dates of the earliest ribbed vaults? I think it must be admitted that, so far as the buildings which have survived are concerned, the Romanesque architecture of Normandy and England at the end of the eleventh century was decidedly in advance of that of the Ile-de-France. In the construction of groined vaults over irregular spaces, what churches of the Ile-de-France show such ingenuity as is displayed in the crypts of Winchester and Worcester? Even for the earlier years of the twelfth century we should be led to the same conclusion, if we compare the great churches of Normandy and England with the nave of Saint-Germain des Prés, Paris, one of the richest abbeys in the north of France. Why, then, should we be surprised to find that Normandy started in the race before the Ile-de-France?

Nor need it astonish us if we should find inno-

* *Discours sur les origines de l'architecture gothique*, by M. le Comte de Lasteyrie, Membre de l'Institut, Directeur de la Société des Antiquaires de Normandie, Caen, 1901. The passages in question are, by the kind permission of M. de Lasteyrie, reprinted at the end of this reply.

† *The Beginnings of Gothic Architecture: Norman Vaulting in England*, in the JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS, 3rd series, VI. 289 et seq.

* *L'Architecture religieuse dans l'ancien diocèse de Soissons au XI^e et au XII^e Siècle*, by Eugène Lefèvre-Pontalis, i. 96.

ventions in English churches during the last years of the eleventh century rather than in those of Normandy itself; for it should be borne in mind that at this time Norman architecture was in a more flourishing state in England than in the duchy. Witness the numerous vast buildings commenced on this side of the Channel, while Normandy at this very time was suffering from severe social and political disorders under Duke Robert.* The energies of the Normans were naturally concentrated on the new and promising field of activity in England.

If I understand M. de Lasteyrie correctly, he considers that whatever vaults were built in a Norman or English church (it matters little which) at the end of the eleventh century must necessarily have been unribbed groined vaults and not ribbed vaults. I do not remember hearing this objection raised when M. Lefèvre-Pontalis attributed, without any documentary evidence whatever, the ribbed vaults of Rhuys and Auville to the end of the eleventh century, to say nothing of the date which he first assigned to those of the ambulatory of Morienval. Are we then to assume that what was possible at that time in the Ile-de-France was impossible in Normandy or England? The presumption from the general character of the architecture of the two countries appears to me to be in the opposite direction.

Let us put aside, for a moment, any question of the date of the earliest ribbed vaults in England, and let us compare these vaults with those over the eastern bays of the nave aisles of Saint-Étienne, Beauvais, which M. Lefèvre-Pontalis attributes to about 1120.† In point of style and detail, and, what is much more important, in point of system, the English vaults represent a less advanced stage of development than those of Saint-Étienne. In all the earliest examples in England, while the transverse ribs are semicircular (or nearly so), the diagonal ribs are segments of circles struck from centres below the level of the springing, in order to avoid raising the keys of the diagonal ribs much above those of the transverse ribs. In the aisle vaults of Saint-Étienne the semicircular transverse ribs and arcade arches are considerably stilted, in order that the diagonals may be semicircular, or nearly so. But before this latter stage could be reached, an earlier experimental stage, such as that represented by the English vaults, must have been passed. However, so far as I am aware, we look in vain for examples of such an earlier stage in the vaults of the Ile-de-France. And it must be remembered that the English vaults in question are not merely isolated vaults under towers, or vaults over single bays, but in some cases extend over the whole length of the aisles of great

churches of a length then unknown in Normandy or the Ile-de-France.

As Herr Dehio has said, the sexpartite vaults of the Caen group have an important bearing on this question of relative date.* M. de Lasteyrie quotes the general opinion that they are not earlier than the second half of the twelfth century, but he admits that M. Régnier was possibly right when he said, "Les voûtes normandes peuvent tout aussi bien remonter à 1130 qu'à 1160" (p. 28). The less developed form—a quadripartite vault divided by a secondary transverse rib carrying a wall—which is found in this group, is unknown in the Ile-de-France, and this form must have been preceded by experiments with the simple quadripartite vault. Herr Dehio's argument, that so much time must be allowed for the development of these different varieties of vaults that influence from the Ile-de-France cannot be admitted, leads also to the conclusion that it is not very bold to place the earliest of these experiments near the beginning of the twelfth century.

I come now to the special objections which M. de Lasteyrie raises to the dates which I have assigned to the vaults of the cathedral of Durham. But, before attempting to answer these objections, I must clear up two points upon which M. de Lasteyrie has misunderstood me. I have not said that the choir of Durham was finished before 1099 (p. 34). On the contrary, there is no evidence to show that it was completed before 1104, the date of the translation of the body of Saint Cuthbert into the new choir. It does not appear to me to be probable that the completion of the choir would exactly coincide in date with the accession of Bishop Ralph Flambard, and I think that this is not conveyed by the words of the chronicle. I take the meaning of the words *usque navem Rannulfus jam factum invenit* † to be that the works had then (1099) advanced as far as the nave, but this does not necessarily imply that the choir was then finished. What I have suggested is that the vaults of the choir were completed in 1104.

With regard to the east wall of the transept, it is evident that I have not made my meaning clear, for what I intended to convey is not open to the criticism which M. de Lasteyrie expresses on p. 37. My view is that the eastern wall of the transept (north and south), as far as the top of the triforium, was constructed to receive vaults, as in the choir, with which this side of the transept formed a continuous work; but that the idea of building a vault over the south transept was abandoned, and its clerestory was constructed to

* *Die Anfänge des gotischen Baustils*, by G. Dehio, 1896.

† In the passage quoted from Symeon's continuator (*JOURNAL R.I.B.A.*, VI. 296).

* See *Ordericus Vitalis*, viii. ch. 15, end.

† *Op. cit.* i. 76.

receive a wood ceiling.* This is not the case in the north transept, which was actually vaulted at once in accordance with the original plan. In the south transept a second change of intention followed, and the actual vault was constructed.

M. de Lasteyrie believes that the vaults over the aisles of the choir of Durham were originally unribbed groined vaults, and that the diagonal ribs were subsequent additions (p. 85). He finds a proof of this in my figure 12,† which shows how the diagonal ribs at their springing cover part of the mouldings of the arches of the choir arcade. This bad fitting occurs only at one of the four angles of each bay, and it arises from a want of correspondence between the plan of the pier and the plan of the springing of the arches and vaults. At the other three angles of each bay the diagonal ribs at their springing clear themselves as well as they usually do in these early vaults.‡ But examples of similar awkward fitting, more or less, are common enough in early ribbed vaults, as will be seen from the following instances from well-known churches in France itself:—

In the chancel of Bellefontaine the diagonal ribs at their springing mask part of the rolls of the chancel arch, and the rolls of the diagonals at their springing are partly intercepted by the chancel arch and by the wall. The diagonal ribs of the nave aisles also show an incomplete profile at their springing.

In the chancel of Marolles-en-Brie part of the roll of the diagonal rib is masked by the transverse rib at its springing.

In the ambulatory of Saint-Maclou, Pontoise, the diagonal ribs, at their springing above the piers of the apse, mask part of the roll, hollow, and quirk of the transverse rib; and on one side of the diagonal rib its hollow and small roll are intercepted by the transverse rib.

In the ambulatory of Saint-Denis, the diagonal rib at its springing covers part of the roll of the transverse rib. In the ambulatory of Saint-Germain des Prés, Paris, the profiles of the rolls of the diagonal and transverse ribs are incomplete at their springings.

In the nave aisles of Noyon Cathedral, above the minor piers, the hollows of the diagonal ribs are intercepted by the arcade arches.

In the choir aisles of Laon Cathedral, above the choir piers, the diagonal ribs mask a considerable part of the mouldings of the transverse ribs and arcade arches, and this is also the case to a less extent in the nave aisles.

This list might easily be considerably extended from other Transitional churches. If we find

instances of such bad fitting in ribbed vaults the character of which is much more advanced than that of the Durham vaults, we cannot, I think, be surprised to find them in a pronounced form in the most primitive examples. Yet this is practically the only argument in favour of M. de Lasteyrie's theory that the aisles of the choir of Durham were originally covered with unribbed vaults. However, this theory is emphatically contradicted by the plan of the engaged shafts at the angle of the choir aisles and transept aisles,* for these shafts, from the floor to the top of their capitals, form part of the original construction of the aisle walls. The five ribs to be supported at this point are received, three by triple shafts of the same plan as elsewhere in the aisles, and two by a pair of unsymmetrical shafts. This plan can only be explained by the conclusion that the shafts were planned to receive the ribs of the existing vaults.

If the aisles of the choir and transept of Durham were originally covered with unribbed vaults, as M. de Lasteyrie believes, the existing diagonal ribs cannot have been added under the groins of these vaults, for a sufficient reason which I have already explained.† The original vaults must therefore have been demolished before the actual ribbed vaults could have been constructed. It is clear, too, that the existing vaults over the aisles of the choir, transept, and two eastern bays of the nave must, from the character of their details, be attributed to an earlier date than the vaults over the remaining bays of the aisles of the nave. In concluding that there is not at Durham a single ribbed vault which can be earlier than 1133 (p. 88), M. de Lasteyrie admits a possible exception in favour of the vaults of the aisles of the nave, apparently for the simple reason that ribbed vaults of the first thirty years of the twelfth century are to be found in the Ile-de-France. But if the other vaults at Durham are not earlier than 1133, neither are those of the nave aisles. One of the most important points to be observed in this discussion is that, whatever the true dates of the Durham vaults may be, their chronological sequence is clearly proved by their architectural character. This sequence, of course, includes the high vaults and the vault of the chapter-house. I have already sufficiently discussed the high vaults, and I have shown that the clerestories of the north transept and of the nave were built to receive the actual vaults.‡ I need only remark here that, because the actual vaults were not originally provided for, either in the nave or in the clerestory of the south transept, this is no proof that the existing vaults were not built before 1133. We know that the building of

* This is explained in my note in the JOURNAL R.I.B.A., VI. 347, which I believe was not before M. de Lasteyrie when his address was delivered.

† JOURNAL R.I.B.A., VI. 300.

‡ *Ibid.*, fig. 10, p. 298.

* JOURNAL R.I.B.A., VI. fig. 13, p. 300.

† *Ibid.*, pp. 299, note ‡, and 304.

‡ *Ibid.*, p. 348.

the nave extended over a period of thirty-four years, and this is quite sufficient to allow ample time for changes of plan.

What then is the chronological sequence of these vaults as indicated by their character? Let me enumerate the vaults in question.

In the vaults over the aisles of the choir, of the transept (north and south), and of the two eastern bays of the nave—eighteen bays in all—the profiles of the transverse and diagonal ribs are similar to those of the arcades—simple mouldings, without zigzags.*

In the vaults of the remaining bays of the nave aisles—to the number of twelve bays, including those under the western towers—the transverse ribs show the same profile as those of the aisles of the choir and of the transept, while the diagonal ribs have a large roll flanked by zigzags. These zigzags are of precisely similar character to those of the nave arcades, and the change in the profile of the diagonals begins precisely at the same point (the second pier to the west of the crossing) where zigzags are substituted for plain mouldings in the arcades.†

In the high vault of the north transept there are no zigzags. The diagonals have the same profile as those of the aisles of the choir and transept—a large roll between two hollows—which is also the profile of the inner order of the transverse arches, the outer order being square, not moulded.‡

In the high vault of the south transept the profile of the diagonal ribs shows a large roll flanked by zigzags,§ which are as simple in character as the earliest zigzags in the church. The inner order of the transverse arches has a large roll between two hollows, and the outer order is decorated with zigzags of exactly the same detail as those in the nave arcades (west of the second pier west of the crossing).

In the high vault of the nave the profile of the diagonal ribs shows a large roll flanked by zigzags, which are similar in character to those of the diagonal ribs of the south transept, but a little less simple. The outer order of the transverse arches has zigzags similar to those of diagonals, but with an additional hollow and fillet. In the clerestory of the nave (which, as I

have shown, was built with the vault) the central arch of the triple arcade in each bay is decorated with a zigzag of which the outer face is like the zigzag on the diagonal ribs of the nave aisle vaults, and the intrados like that on the diagonal ribs of the high vault of the south transept.

Finally, in the chapter-house (completed under Geoffrey Rufus, 1133-1140) the profile of the transverse ribs of the vault shows a large roll flanked by a flat face, a smaller roll, and a hollow; and that of the diagonal ribs shows a pointed roll between zigzags of a pattern slightly more elaborate than any of those noticed above.

The chronological sequence, then, of these vaults is clearly indicated by the characteristics which I have described. If we are to accept M. de Lasteyrie's theory that these vaults were reconstructed after the nave was finished in 1133, a difficulty presents itself which seems to me to be quite insuperable. We should be forced to conclude that, in reconstructing the aisle vaults, the builders purposely imitated, in the first case, the simple profiles of the arcades which adjoin them, continuing these profiles into the aisles of the nave to the point where zigzags are introduced into the mouldings of the great arcades, and that at this point they began to ornament the diagonal ribs with zigzags of the same character as those of the arcades; that they used their most primitive profiles in the high vault of the north transept, progressing gradually in those of the south transept and of the nave to the least primitive of all in the vault of the chapter-house. This is an impossible view, for it assumes a procedure which is directly contrary to the practice of mediæval builders, especially in the mid-twelfth century, when architecture was progressing with such rapid strides. M. de Lasteyrie does not suggest any date for the reconstructions which he assumes. If any of them be placed in the episcopate of Geoffrey Rufus (1133-1140), then it must be explained why all show work of less advanced character than the vault of the chapter-house. Or, if this too was a later reconstruction, the difficulty becomes greater rather than less, for we possess a complete series of the building works of Bishop Pudsey, extending over the whole period of his episcopacy from 1153 to 1195,* and all these are much more advanced in their character than even the vault of the chapter-house. I am convinced, then, that the existence of these vaults can only be satisfactorily explained by placing them at or near the dates which I have assigned to them in my Paper.

May I, in conclusion, venture to express the hope that some of the French archaeologists who

* See fig. 10, p. 298, JOURNAL R.I.B.A., Vol. VI. The profiles of the two eastern arches of the nave arcades are the same as those of the choir and east side of the transept.

† The arch of the triforium of the eastern half-bay of the nave, which belongs to the first section of the works, shows no zigzags. The arches of the remaining bays of the nave triforium are decorated with zigzags of precisely the same pattern as those of the nave arcades. It is worth notice also that, starting from the third pier west of the crossing, the width of each half-bay of the nave is increased by 2 ft. 1 in. to 2 ft. 3 in.

‡ See fig. 25, p. 313.

§ See fig. 30, p. 346.

|| See fig. 26, p. 315, and fig. 31, p. 347.

* See *Bishop Pudsey's Buildings in the Present County of Durham*, by W. H. D. Longstaffe, in the *Transactions of the Architectural and Archaeological Society of Durham and Northumberland*, vol. i. (1862), p. 1.

disagree with my conclusions may be induced to investigate these questions in the buildings themselves, not only at Durham, but also in other English churches which contain early examples of the ribbed vault?

EXTRACT FROM "DISCOURS SUR LES ORIGINES DE L'ARCHITECTURE GOTHIQUE."

By M. LE COMTE DE LANSTYRIE.

p. 25 Les causes qui ont donné naissance à l'art gothique et qui ont présidé à son prodigieux épanouissement ne peuvent donc laisser place à aucun doute.

p. 26 Je serai moins affirmatif en ce qui concerne une autre question que la grande majorité des archéologues français semble aujourd'hui considérer comme pleinement résolue, et sur laquelle je ne crois pas que le dernier mot soit dit encore.

Où faut-il chercher le berceau de l'architecture gothique?

Tout le monde, à l'étranger comme chez nous, est d'accord pour en faire honneur à la France; mais à quelle partie de notre pays appartient-il plus spécialement? Voici le point délicat.

La plupart de nos savants sont d'accord pour affirmer qu'elle est née dans la partie septentrionale de l'Ile-de-France, dans la région comprise entre les rives de la Seine, de l'Oise et de l'Aisne. C'était l'opinion de Quicherat et de Viollet-le-Duc, et j'ai quelque peu contribué à la répandre pour ma part, car je l'ai professée longtemps, et, pour l'étayer d'arguments solides, j'ai inspiré à certains de mes élèves, devenus aujourd'hui des maîtres, des travaux qui leur ont valu une réputation méritée.

Plus je vais cependant, et plus je suis convaincu qu'il y a lieu d'amender un peu cette doctrine, et de faire, aux architectes de l'Ile-de-France, une part un peu moins exclusive dans la genèse de l'art gothique.

Ce n'est pas, bien entendu, que je veuille contester un seul moment le rôle capital qu'ils ont joué dans la rapide transformation de l'architecture française au XII^e siècle. Mais j'ai de puissantes raisons de croire que ce mouvement irrésistible, qui entraînait les constructeurs français dans des voies nouvelles,

p. 27 n'était pas limité à l'Ile-de-France. D'autres provinces y ont participé et, le jour où de dignes émules de mon ami Lefèvre-Pontalis leur auront consacré des monographies archéologiques, aussi complètes que celle dont il a gratifié le Soissonnais, on aura la preuve, je n'en doute pas, que si, vers le début du XII^e siècle, quelque méchante fée avait pu d'un coup de baguette faire disparaître toute l'Ile-de-France, l'architecture gothique n'en serait pas moins née. Sans doute, elle aurait affecté des caractères un peu différents de ceux qu'elle a revêtus, son évolution eût peut-être été moins rapide et son succès moins général; mais comment mettre en doute son prochain avènement, quand on voit, dès le début du XII^e siècle, certains édifices de l'Anjou, et surtout de la Bourgogne, contenir déjà en germe les éléments essentiels de l'architecture gothique?

Et la Normandie même, est-il bien sûr qu'on lui attribue toute la part qui lui est due dans la genèse de l'art gothique? C'est une question qui mérite d'attirer votre attention, Messieurs, car elle a été l'objet, dans des travaux récents, d'appréciations tout à fait contradictoires.

Depuis que Georges Bouet et Ruprich-Robert ont démontré que les belles voûtes de Saint-Étienne de Caen sont une addition à la construction première, depuis qu'un examen plus minutieux des monuments a fait reconnaître que les grandes églises romanes de Normandie avaient été bâties primitivement sans voûte sur la nef, et que celles qu'on y voit aujourd'hui ont été ajoutées après coup, on a

p. 28 conclu un peu vite que les architectes normands n'avaient en rien contribué à la formation de l'architecture gothique. Mais il y a là une affirmation dont l'exactitude, je suis obligé de l'avouer, n'est pas démontrée, car, en réalité, nous ne savons pas à quelle époque remontent les remaniements que nous constatons à Saint-Étienne de Caen, à Boscherville, à Lessay, etc. L'opinion commune est qu'ils ne sont pas antérieurs à la seconde moitié du XII^e siècle. Je suis très disposé à le croire, je l'ai souvent dit dans mes leçons, et mon ami Lefèvre-Pontalis l'a répété dans son beau livre, mais personne n'en a encore administré la preuve tout à fait certaine, et je suis obligé d'avouer, Messieurs, qu'un de vos compatriotes, M. Louis Régnier, était peut-être dans le vrai quand il a dit: "Les voûtes normandes peuvent tout aussi bien remonter à 1130 qu'à 1160; leur date exacte est une problème dont nous n'avons pas encore la solution."*

Et la question que je pose ici, un autre archéologue de grande valeur, mon très savant ami, M. Anthyme Saint-Paul, l'a posée avant moi en termes que vous me permettez de rappeler:

"L'heure me semble venue," dit-il, "de nous demander s'il faut, oui ou non, associer la Normandie au mouvement transitionnel. . . La Normandie a mis autant d'ardeur à adopter la nervure, que le bassin de l'Oise à s'emparer de l'arc brisé. . .

p. 29 Enclin à multiplier les lignes dans les archivôles, les jambages, les piliers, le Normand ne pouvait manquer de les ramifier dans les voûtes. De là les voûtes à huit divisions sur plan carré, comme celles de Saint-Romain (à Rouen); de là les voûtes sexpartites, comme celles de Caen et de Creully, et parmi ces voûtes, j'en suis convaincu, il en est d'antérieures à Saint-Denis ou tout au moins contemporaines. A plus forte raison seraient antérieures ou contemporaines les voûtes à croisées simples, comme celles de Montivilliers (croisillons), de Fontaine-Henry, de Lessay."†

J'ai peine à croire, je le déclare, qu'aucun des exemples invoqués ici par M. Anthyme Saint-Paul puisse être antérieur à 1140. Mais, dans l'état actuel de la science, il est difficile de l'affirmer; bien plus, depuis que mon savant ami a écrit ces lignes, il a pu trouver des arguments nouveaux dans un mémoire très documenté et très habilement présenté qu'un archéologue anglais, plein de talent, a consacré aux origines de l'architecture gothique et aux plus anciens exemples de croisées d'ogives dont les églises anglaises de style normand offrent actuellement des exemples.‡

Le mémoire de M. Bilson est assez important et encore assez peu connu en France pour que vous me

p. 30 permettiez de vous en présenter un résumé rapide. Il tend à prouver qu'il existe dans un certain nombre d'édifices normands d'Angleterre des voûtes

* Les origines de l'architecture gothique, dans les *Mém. de la Soc. hist. et archéol. de Pontoise*, t. XVI, p. 119-120.

† La transition, p. 27-28 (extr. de la *Revue de l'Art chrétien* de 1895).

‡ J. Bilson, *The Beginnings of Gothic Architecture*, dans le *Journal of the Royal Institute of British Architects*, 3^e série, t. VI, p. 259 et s.

sur croisées d'ogives remontant non seulement au début du XII^e siècle, mais peut-être même aux trois ou quatre dernières années du XI^e. Elles seraient donc aussi anciennes, peut-être même davantage, que les plus anciennes voûtes d'ogives que l'on ait encore signalées dans l'Ile-de-France. Ces voûtes anglo-normandes se rencontreraient non seulement sur les bas-côtés, mais même sur le chœur ou sur la nef d'édifices achevés avant 1135.

Voilà qui est de nature à faire tressaillir tous les archéologues de Normandie : car, si leurs ancêtres ont introduit d'aussi bonne heure les ogives en Angleterre, il n'est pas possible qu'ils n'en aient pas élevé à la même époque dans leur province d'origine, il n'est pas probable que toutes aient disparu, il faut donc vous mettre en chasse, Messieurs, pour les retrouver : il faut explorer méthodiquement toutes vos églises, scruter à fond tous les textes qui s'y rapportent, car enfin nous pouvons avoir péché par excès de critique, nous pouvons avoir rajeuni ces monuments outre mesure.

Aucune question ne mérite un examen plus approfondi, car s'il est prouvé que, dès l'aurore du XII^e siècle, les architectes normands ont su jeter des croisées d'ogives au-dessus du vaisseau central de leurs églises, c'est en Normandie qu'il faut placer le berceau de l'architecture gothique, et non dans l'Ile-de-France : car à cette date on n'en était pas p. 31 là sur les bords de la Seine, de l'Oise et de l'Aisne, on ignorait encore tout le parti qu'on pouvait tirer de la croisée d'ogives, on en faisait de timides essais sur les collatéraux, sur le chœur des petites églises rurales, on n'osait pas en jeter sur la nef des grandes églises.

Si donc les architectes normands ont osé le faire avant 1130, qu'on en trouve la preuve en Angleterre ou dans la Normandie continentale, peu importe, c'est un nouveau titre d'honneur pour votre province. Reprenez donc, Messieurs, l'étude de vos églises, mettez-vous en quête des vieilles ogives, tâchez d'en découvrir les dates, et si elles confirment ce que je viens de dire, faites-nous le vite savoir pour la plus grande gloire de la Normandie !

Je ne voudrais pas, Messieurs, refroidir une ardeur qui se manifeste par d'aussi chaleureux applaudissements, mais avant de vous laisser partir en campagne, je dois loyalement vous avertir que si votre chasse aux ogives était un peu fructueuse, je ne serais pas le dernier à m'en réjouir, mais je serais le premier à m'en étonner.

Le motif qui me fait parler ainsi c'est qu'en Angleterre, où M. Bilson a déployé tant d'ingéniosité dans ses recherches, les résultats qu'il a obtenus ne me paraissent pas être aussi probants qu'il l'imagine.

Je ne voudrais pas entamer ici une discussion technique qui serait longue et qui paraîtrait bien aride aux dames qui m'écoutent. Je n'oserais d'ailleurs discuter publiquement les théories d'un auteur aussi compétent avant d'avoir pu aller les contrôler sur place. Mais je me crois autorisé à p. 32 faire certaines réserves et à manifester la crainte que M. Bilson ne se soit laissé entraîner par l'intérêt de sa thèse et n'ait vieilli à l'excès la plupart des édifices dont il parle.

Voici la cathédrale de Durham, par exemple, qui est comme la pierre angulaire de tout son système. Elle est entièrement voûtée d'ogives, et M. Bilson assure que ses voûtes n'ont jamais été refaites.*

* Sauf celles du chœur, mais qui elles-mêmes auraient été rebâties au XIII^e siècle sur le même type que les voûtes originales. J'en reparlerai plus loin.

Or, des textes très positifs nous renseignent sur les diverses étapes de la construction, et si on doit les appliquer à l'état actuel du monument, comme le soutient M. Bilson, il est certain que les architectes normands avaient alors une avance marquée sur leurs confrères de l'Europe entière et que les architectes de l'Ile-de-France, en particulier, doivent saluer en eux leurs précurseurs, car aucun n'aurait osé à pareille date jeter une voûte d'ogives en travers de la nef d'une cathédrale.

Les dates exactes des voûtes de l'église de Durham ont donc une importance capitale. M. Bilson se flatte d'avoir, pour les déterminer, des témoignages contemporains et par conséquent irréfutables.*

Ils nous apprennent que la première pierre de l'édifice fut posée par l'évêque Guillaume de Saint-Calais, le 11 août 1093.

Nous n'avons pas d'indication formelle sur l'état d'avancement des travaux lorsque Guillaume mourut en 1096. Nous savons seulement qu'il s'était mis d'accord avec les moines appelés à desservir le siège épiscopal pour bâtir l'église à ses frais, pendant que les moines prenaient à leur charge la construction du monastère qui devait les abriter. Mais à sa mort cette convention ne fut plus observée et les moines, abandonnant la construction des lieux réguliers, mirent toutes leurs ressources à continuer la cathédrale. Ils travaillèrent si bien qu'en 1099, lorsque Raoul Flambard monta sur le siège de Durham, on était à la nef. Le nouvel évêque poursuivit l'œuvre, mais avec des alternatives d'ardeur et de relâchement, suivant que les oblations des fidèles étaient plus ou moins abondantes. A la fin de son épiscopat, en 1128, la nef était élevée jusqu'à la naissance des voûtes. Celles-ci furent bâties par les soins des moines pendant la vacance du siège qui dura jusqu'à l'avènement de Geoffroy Le Roux, en 1133.

La chronique, en nous apprenant que le chœur de la cathédrale de Durham fut commencé par Guillaume de Saint-Calais et terminé avant 1099,† ne nous dit pas s'il était voûté ; mais s'il ne l'était pas, il le fut bientôt, car on procéda en 1104 à la translation solennelle des reliques de saint Cuthbert dans un monument situé à l'extrémité orientale de l'église, c'est-à-dire au fond du chœur, et Guillaume de Malmesbury nous raconte un fait miraculeux qui se passa à cette occasion. On était embarrassé pour mettre les reliques en place, car le chœur était encore encombré par les cintres de la voûte que l'on venait d'achever.‡ Mais, dans la nuit qui précéda la cérémonie, saint Cuthbert eut l'obligeance de venir les enlever lui-même.§

p. 35 L'église cathédrale de Durham était donc en-

* Voir les textes qu'il rapporte dans son *Mémoire*, p. 295 et s.

† M. Bilson croit qu'il fut bâti entre 1096 et 1099, car on sait qu'à l'avènement de Raoul Flambard, en 1099, chœur et transept étaient terminés. Or, on constate certaines différences entre l'ordonnance du chœur et celle du transept, d'où l'on peut conclure que le chœur était achevé à la mort de Guillaume de Saint-Calais, en 1096, et que c'est au transept que s'étaient mis les moines, lorsqu'ils s'étaient occupés de continuer la construction pendant les trois ans qui s'écoulèrent entre la mort de l'évêque Guillaume et l'avènement de Raoul Flambard (Bilson, p. 296). Je ne m'arrêterai pas pour le moment à discuter ce point.

‡ "Materia lignorum, quæ recentem presbyterii testudinem sustinebat." (Will. Malmesb., *De gestis pontificum*, l. III, c. 135).

§ *Ibid.*

tièrement voûtée en 1133. M. Bilson cherche à démontrer que les voûtes étaient sur croisées d'ogives et que, sauf sur le chœur, c'étaient les mêmes que nous voyons aujourd'hui, attendu que les textes ne mentionnent plus dans la suite aucune reconstruction totale ou partielle.

Pour moi, je crains bien que la cathédrale de Durham ne nous fournisse une seconde édition de l'histoire de la cathédrale de Coutances, et avant d'admettre que le chœur d'une église anglaise quelconque ait été voûté d'ogives dès 1096 ou 1099, c'est-à-dire pas loin d'un demi-siècle avant la construction des voûtes de Saint-Denis, j'attendrai qu'un minutieux examen archéologique m'en ait rendu sûr et trois fois sûr.

M. Bilson s'est bien douté que ses assertions rencontreraient quelque scepticisme chez ses confrères, aussi a-t-il déployé beaucoup de talent, photographié et dessiné beaucoup de détails pour les convaincre. Mais ce sont précisément ses dessins qui ont le plus contribué à fortifier mes doutes. Il y en a un tout spécialement * qui me paraît prouver, ce dont vous vous doutez tous, c'est que les ogives des bas-côtés du chœur ont été ajoutées après coup, car on les a maladroitement introduites dans une place qui ne leur était pas destinée et elles masquent une partie des moulures de l'arcade qui les avoisine. J'y trouve la preuve que les bas-côtés du chœur de Durham étaient primitivement voûtés d'arêtes. †

p. 36 La partie haute du chœur l'était aussi, ce qui n'a rien d'anormal, puisque la Trinité de Caen et Saint-Georges de Boscherville offrent des exemples analogues. M. Bilson, qui connaît si bien l'architecture normande, n'aurait jamais pu concevoir le moindre doute sur ce point, si, convaincu que les bas-côtés avaient été, dès le début, voûtés d'ogives, il ne lui avait paru pas trop invraisemblable qu'on eût employé cet artifice de construction sur de petits espaces comme les collatéraux, et omis de le faire pour de grandes voûtes comme celles du chœur où les nervures étaient bien autrement utiles.

Mais je répète que les bas-côtés ne devaient avoir à cette époque que des voûtes d'arêtes, l'argument n'a donc aucune valeur, et on doit conclure, sur la foi de tous les exemples connus, que le chœur de Durham ne possédait, au début du XII^e siècle, que des voûtes d'arêtes.

M. Bilson a constaté qu'en bâtissant le transept de Durham, entre 1096 et 1099, on ne comptait point le voûter, car il n'existe sur le mur occidental aucune trace des piédroits que les architectes n'auraient pas manqué de placer à chaque retombée de voûtes, si cette partie de l'édifice avait comporté dans le projet primitif des ogives ou simplement des voûtes d'arêtes. Mais, ajoute-t-il, on changea de plan en cours d'exécution, car on introduisit dans la construction du mur oriental des piédroits qui correspondent aux voûtes d'ogives sur plan barlong, dont le transept est actuellement recouvert. Celles-ci ayant mêmes profils que celles du chœur doivent être à peu près du même temps, c'est-à-dire de 1099 environ ou tout au plus de 1104. ‡

Je crois qu'ici encore M. Bilson se trompe, car les travaux ayant commencé par le chœur, le mur

oriental du transept ne saurait être postérieur au mur occidental, à moins d'avoir été reconstruit après coup. Or, s'il a été bâti pour porter des voûtes, il est certainement moins ancien que celui de l'ouest, puisque ce dernier appartient à un stage de la construction qui n'en comportait pas. § Il est donc certain qu'il n'appartient pas à la construction première, et comme il offre, dit M. Bilson, la plus grande ressemblance avec le chœur, voilà un argument de plus pour soutenir que le chœur a subi des retouches considérables et qu'aucune des croisées d'ogives qu'on y voit n'est aussi vieille que le dit M. Bilson.

Arrivons aux voûtes de la nef. Elles auraient été bâties, les basses entre 1099 et 1128, les hautes entre 1128 et 1133. Nous avons dans l'Ile-de-France trop de collatéraux voûtés d'ogives pendant les trente premières années du XII^e siècle pour qu'on doive à priori se refuser à croire qu'un architecte normand du même temps ait pu en faire de semblables. Mais, pour les voûtes hautes, il est bien certain que les croisées d'ogives barlongues, qui couvrent actuellement la nef de Durham, n'appartiennent point au plan primitif, car il a fallu relancer des corbeaux dans les murs pour en recevoir les retombées, † aucun piédroit n'ayant été prévu à cet effet par l'architecte de Raoul Flambard. L'ordonnance de la nef prouve à l'évidence que si on a vraiment construit entre 1128 et 1133 les voûtes dont parle le continuateur du moine Syméon, c'étaient de grandes voûtes d'arêtes sur plan carré, analogues à celles qui ont dû couvrir à l'origine la nef de Saint-Étienne de Caen.

Donc, à part peut-être dans les bas-côtés de la nef, il n'y a pas, je crois, à Durham, une seule croisée d'ogives qui puisse être antérieure à l'an 1133.

Je ne vous fatiguerai point à discuter l'âge de toutes les autres voûtes dont a parlé M. Bilson. Pour plusieurs, il se trouve en contradiction formelle avec Félix de Verneilh sur des points de fait et, pour me prononcer entre deux hommes dont la science et la sincérité marchent de pair, il faudrait que je puisse apporter un témoignage personnel qui exige une étude attentive sur le monument même.

Je n'ai point eu d'ailleurs la prétention de vous apporter ici une critique approfondie du système de M. Bilson, ni une solution définitive de l'important problème qu'il a soulevé. J'ai voulu seulement, par un exemple, vous montrer combien il régnait encore d'incertitude sur des questions que l'on s'est trop pressé de croire pleinement résolues.

p. 39 Je m'estimerais trop heureux si j'avais pu ainsi piquer la curiosité de quelqu'un d'entre vous, et lui inspirer, par l'insuffisance même de mes observations, l'idée d'entreprendre quelque-une de ces magistrales études dont les Mémoires des Antiquaires de Normandie sont remplis.

Ce serait, Messieurs, un nouveau service rendu à une science dont les origines se confondent avec celles de votre Société elle-même. Ce serait une nouvelle occasion de mettre en lumière la fécondité artistique de vos ancêtres, ce serait un nouvel hommage rendu à notre vieille France, dont on ne célébrera jamais assez le génie artistique et le prodigieux essor.

* Voir dans son Mémoire la fig. 12 de la page 300.

† Les églises normandes contemporaines de Guillaume de Saint-Calais et de Raoul Flambard en offrent beaucoup d'exemples.

‡ Bilson, *The Beginnings of Gothic Architecture*, p. 312 et 313.

* La phototypie placée en tête du Mémoire de M. Bilson, rapprochée de celle qu'il a donnée à la p. 313, prouve clairement ce que j'avance ici.

† Voir la figure 26, page 315 du Mémoire de M. Bilson.

